SHARP

ENGLISH

中文

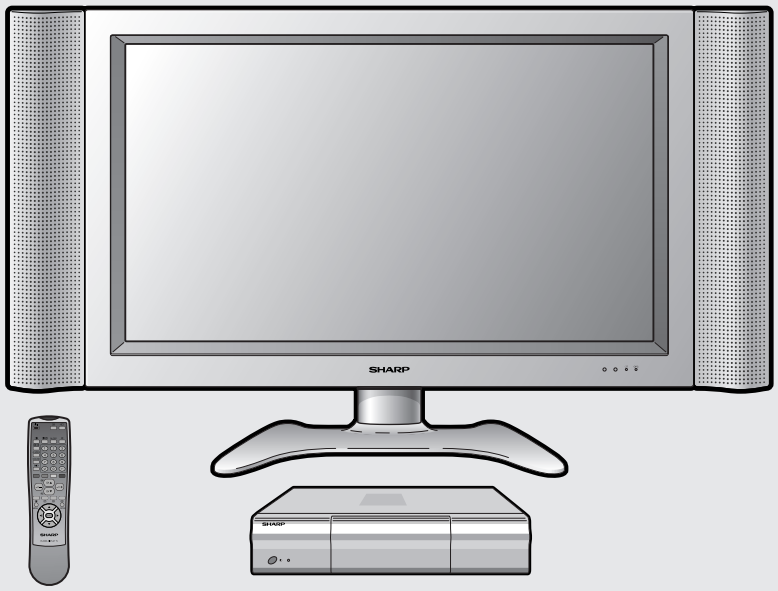
中文

LC-37HV4M

LCD COLOUR TELEVISION
液晶彩色電視機
液晶彩色电视机

OPERATION MANUAL
使用説明書
使用说明书

AQUOS



Printed in Japan
日本印刷
日本印刷
TINS-A642WJZZ

Printed on post-consumer recycled paper.
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LC-37HV4M

LCD COLOUR TELEVISION

ENGLISH

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OPERATION MANUAL

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Dear SHARP customer

Thank you for your purchase of the SHARP LCD colour TV product. To ensure safety and many years of trouble-free operation of your product, please read the Important Safety Precautions carefully before using this product.

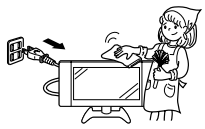
Important Safety Precautions

Electricity is used to perform many useful functions, but it can also cause personal injuries and property damage if improperly handled. This product has been engineered and manufactured with the highest priority on safety. However, improper use can result in electric shock and/or fire. In order to prevent potential danger, please observe the following instructions when installing, operating and cleaning the product. To ensure your safety and prolong the service life of your LCD colour TV product, please read the following precautions carefully before using the product.

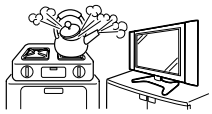
1. Read instructions—All operating instructions must be read and understood before the product is operated.
2. Keep this manual in a safe place—These safety and operating instructions must be kept in a safe place for future reference.
3. Observe warnings—All warnings on the product and in the instructions must be observed closely.
4. Follow instructions—All operating instructions must be followed.
5. Attachments—Do not use attachments not recommended by the manufacturer. Use of inadequate attachments can result in accidents.
6. Power source—This product must operate on a power source specified on the specification label. If you are not sure of the type of power supply used in your home, consult your dealer or local power company.
7. AC cord protection—The AC cords must be routed properly to prevent people from stepping on them or objects from resting on them. Check the cords at the plugs and product.
8. Overloading—Do not overload AC outlets or extension cords. Overloading can cause fire or electric shock.
9. Entering of objects and liquids—Never insert an object into the product through vents or openings. High voltage flows in the product, and inserting an object can cause electric shock and/or short internal parts. For the same reason, do not spill water or liquid on the product.
10. Servicing—Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified service person to perform servicing.
11. Repair—If any of the following conditions occurs, unplug the AC cord from the AC outlet, and request a qualified service person to perform repairs.
    a. When the AC cord or plug is damaged.
    b. When a liquid was spilled on the product or when objects have fallen into the product.
    c. When the product has been exposed to rain or water.
    d. When the product does not operate properly as described in the operating instructions.
    Do not touch the controls other than those described in the operating instructions. Improper adjustment of controls not described in the instructions can cause damage, which often requires extensive adjustment work by a qualified technician.
    e. When the product has been dropped or damaged.
    f. When the product displays an abnormal condition. Any noticeable abnormality in the product indicates that the product needs servicing.
12. Replacement parts—In case the product needs replacement parts, make sure that the service person uses replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. Use of unauthorized parts can result in fire, electric shock and/or other danger.
13. Safety checks—Upon completion of service or repair work, request the service technician to perform safety checks to ensure that the product is in proper operating condition.
14. Wall or ceiling mounting—When mounting the product on a wall or ceiling, be sure to install the product according to the method recommended by the manufacturer.
15. Unplug the AC cord from the AC outlet before installing the speakers.

Important Safety Precautions

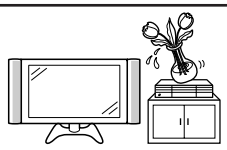
- Cleaning—Unplug the AC cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.



- Water and moisture—Do not use the product near water, such as bathtub, washbasin, kitchen sink, laundry tub, swimming pool and in a wet basement.



- Do not place vases or any other water-filled containers on this product. The water may spill onto the product causing fire or electric shock.



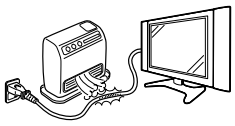
- Stand—Do not place the product on an unstable cart, stand, tripod or table. Doing so can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.

- When relocating the product placed on a cart, it must be moved with utmost care. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.

- Ventilation—The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.

- The LCD panel used in this product is made of glass. Therefore, it can break when the product is dropped or applied with impact. Be careful not to be injured by broken glass pieces in case the LCD panel breaks.

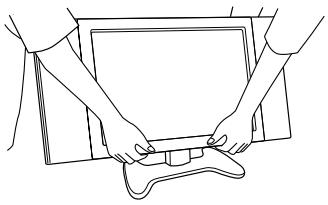
- Heat sources—Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).



The LCD panel is a very high technology product with 3,147,264 thin film transistors, giving you fine picture details.
Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product.

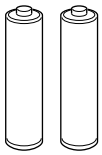
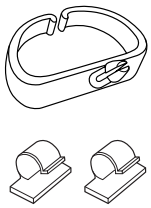
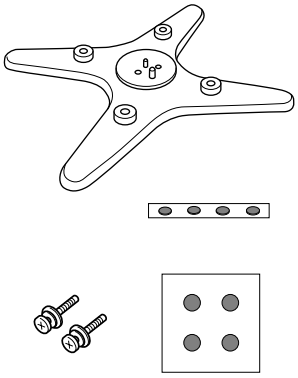
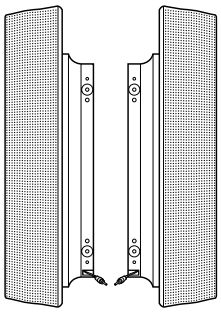
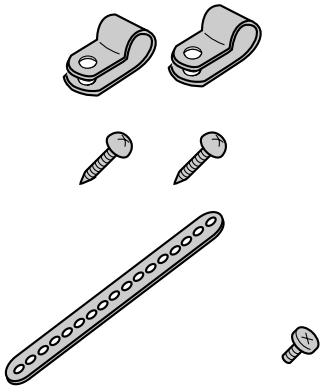
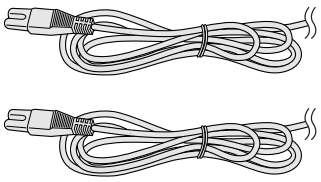
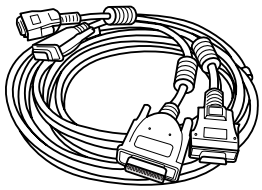
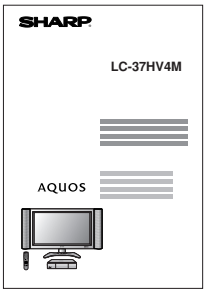
Precautions when transporting the Display

When transporting the Display, never carry it by holding onto the speakers. Be sure to always carry the Display by two people holding it with two hands—one hand on each side of the display.



Supplied accessories

Make sure the following accessories are provided with the product.

Remote control unit (×1)	LR6 (“AA” size) Alkaline battery (×2)	Cable clamp (Large ×1, Small ×2)
		
Page 11	Page 11	Page 9
Stand unit (for AVC System) (×1)	**Speaker unit (×1)**	**Stand stability unit (×1) (To prevent from overturning)**
 Stand (×1) Stand cushion (×4) Stand spacer (×4) Stand screw (×2)	 Speaker (L×1, R×1) Speaker screw (×4)	 Clamp (×2) Clamp screw (×2) Clamp band (×1) Clamp band screw (×1)
Page 10	Page 5	Page 6
AC cord (×2)	**System cable (×1)**	**Antenna cable (×1)**
		
Page 8	Page 8	Page 15
Operation manual		
		

Preparation

Attaching the speakers

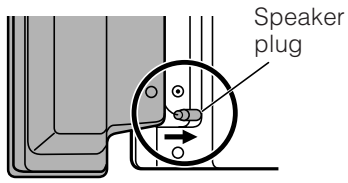
The supplied speaker unit can be attached to or detached from the Display. It must be attached unless you use external amplifier/speakers.

Before attaching (or detaching) speakers, unplug the AC cord from the AC outlet.

Be sure to attach or detach the speakers with two or more people.

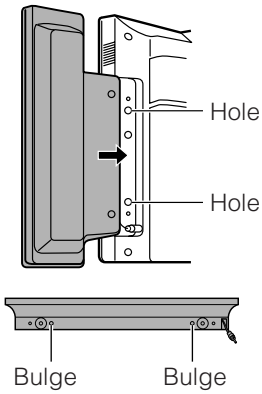
Example: Attaching right speaker.

1



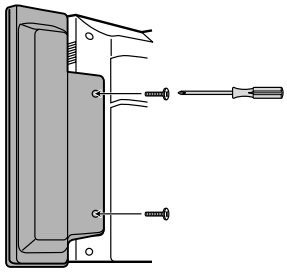
Insert the speaker plug into the terminal on the Display.
- Make sure that the speaker plug is inserted completely.

2



Take hold of the speaker and slowly slide it to the Display.
- Make sure that the two bulges of the speaker align with the holes on the Display.

3



Fasten the screws to secure the speaker in place.
- Use a screwdriver.
- Perform the same steps for attaching left speaker.

CAUTION

- The speaker terminals on the Display are only for the supplied speaker unit. Do not connect any third party plug to the terminal or speaker to the Display.
- Do not handle or move the Display by the speakers.

NOTE

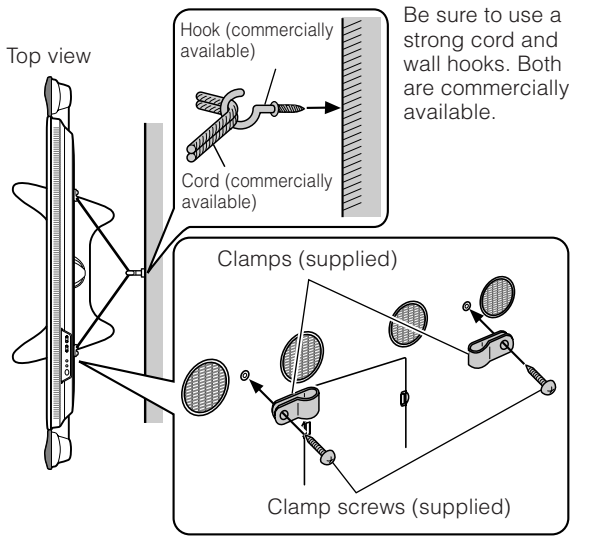
- Perform the same steps for both left and right speakers.
- To detach the speakers, perform the above steps in reverse order.
- You can connect your own amplifier/speakers to the Display. See page 46 for connecting external speakers.

Securing from overturning

How to secure from overturning

1 Attach the supplied clamp for securing from overturning (×2) using the clamp screws.

2 Use a strong cord (commercially available) to secure to a wall or pillar.


Top view
Hook (commercially available)
Cord (commercially available)
Be sure to use a strong cord and wall hooks. Both are commercially available.
Clamps (supplied)
Clamp screws (supplied)

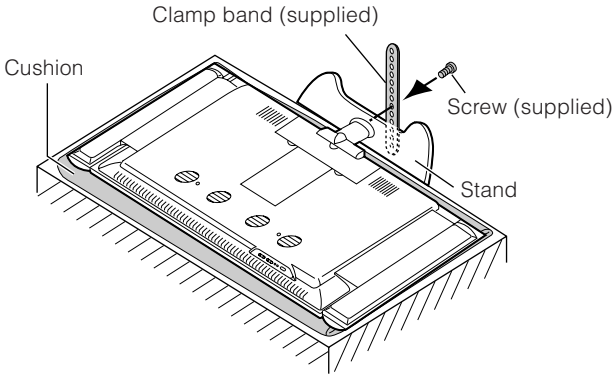
Secure the stand on a platform or the floor.

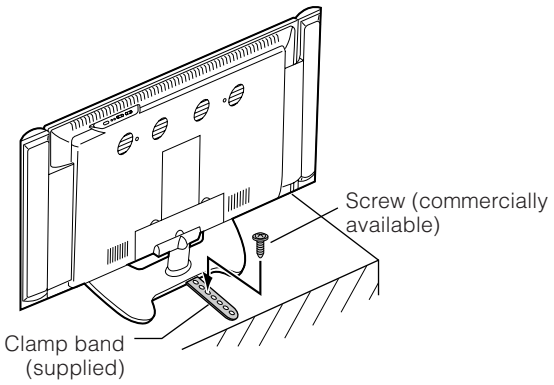
1 Spread a thick soft cloth over the base area and place the Display over it with the screen face down.

2 Attach the supplied clamp band using the supplied screws to the base of the stand.

3 Lift up the Display, place it on a secure platform or floor and align the position.

4 Use wooden screws (commercially available) to secure the metal fixtures to the platform or floor.





NOTE

The Display is heavy so be sure when placing on a platform strong enough to bear the weight. Also be sure the platform width and depth is big enough so that the Display cannot be easily overturned.

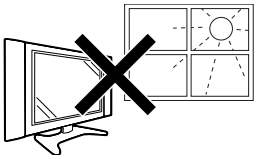
Where to place the System

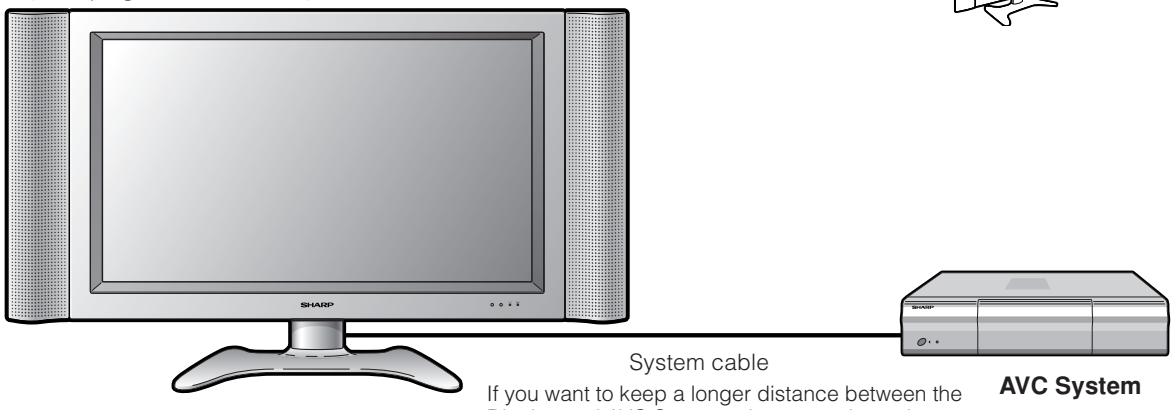
"System" means the Display and AVC System. First select the location where to place the System.

1

Selecting the location of the System

- Select a place with no direct sunlight and good ventilation.
- The Display and the AVC System are connected by the system cable. (See page 8 for details.)





Display

System cable

If you want to keep a longer distance between the Display and AVC System, please purchase the optional system cable AN-07SC1 (about 7 meters). (See page 70.)

AVC System

2

Setting the System in place

Handling the Display

CAUTION

- The Display is very heavy. Move it with two or more people.
- Do not remove the stand from the Display unless using an optional bracket to mount it.
- When moving, put your hands on the Display, but never on the Display speakers.
- Keep enough space above and behind the Display.

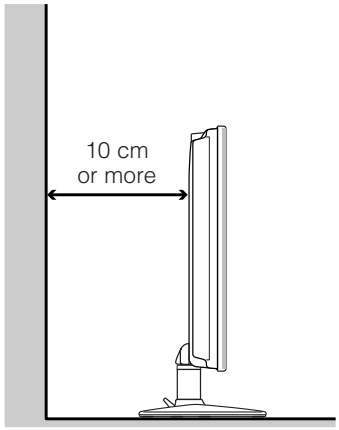
CAUTION

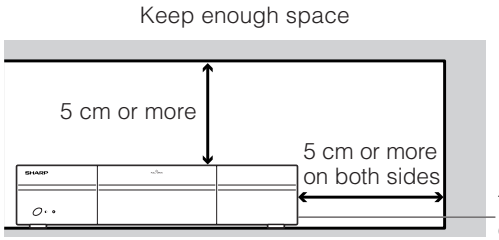
Adjust the screen with both hands. Put one hand on the Display and tilt the screen while steadying the stand with your other hand.
You can adjust the screen vertically up to 4 degrees forward or 6 degrees backward, or rotate 10 degrees horizontally.

Handling the AVC System

CAUTION

- Do not put a VCR or other device on the AVC System.
- Keep enough space above and on the sides of the AVC System.
- Do not block the ventilation openings on the top and left side, and the exhaust fan on the right side.
- Do not spread a thick cloth beneath the AVC System, or cover it with one, as this can cause overheating and result in malfunction.





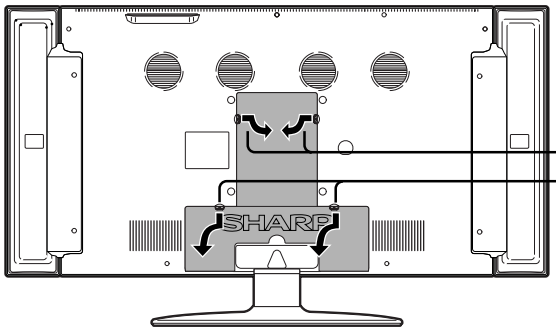
There is an exhaust fan on the right side.

Setting the System

After putting the Display and the AVC System in place, connect the system cables and AC cords. Use the cable clamps for bundling the cables.

1 Removing the terminal cover

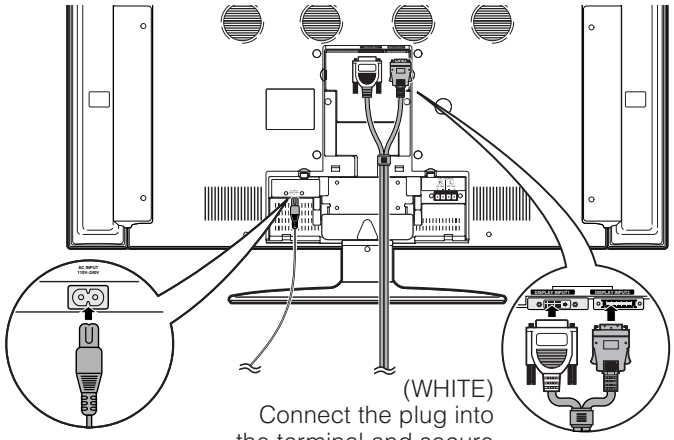
Display (rear view)



Press the two hooks toward the centre of the Display and remove the cover toward you.

Press down the two upper hooks to remove the cover toward you.

2 Connecting the system cable and the AC cord to the Display



AC cord

(WHITE)
Connect the plug into the terminal and secure it by tightening the thumb screws.

System cable

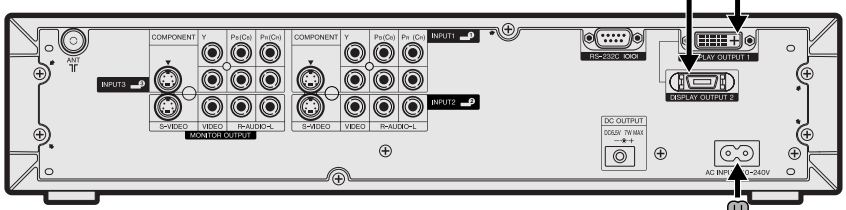
(GREY)
Connect the plug firmly until the hooks on both sides click.

3 Connecting the system cable and the AC cord to the AVC System

System cable

(GREY) (WHITE)

AVC System (rear view)



AC cord

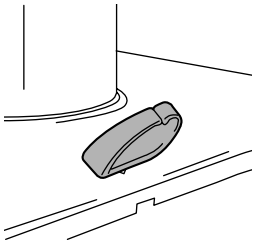
CAUTION

- **TO PREVENT RISK OF ELECTRIC SHOCK, DO NOT TOUCH UN-INSULATED PARTS OF ANY CABLES WITH THE AC CORD CONNECTED.**

4 Attaching the clamps and bundling the cables with the clamp

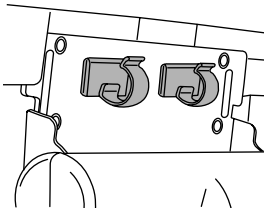
Cable clamp (Large)

Insert the cable clamp in the hole on the Display leg as shown.

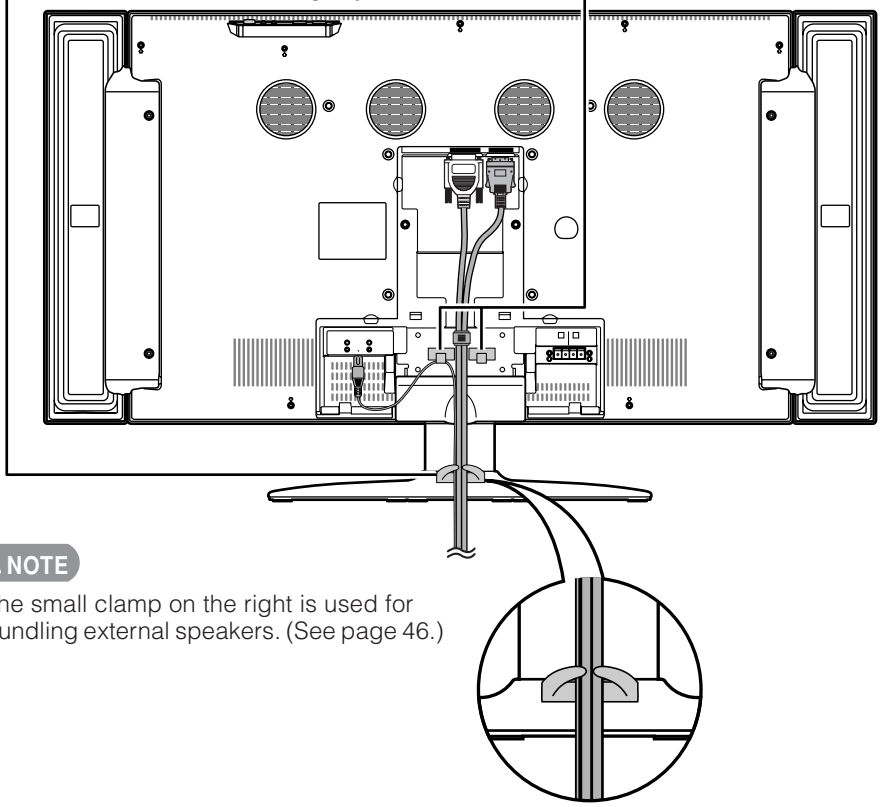


Cable clamp (Small)

Peel off the seal on the back and attach as shown.



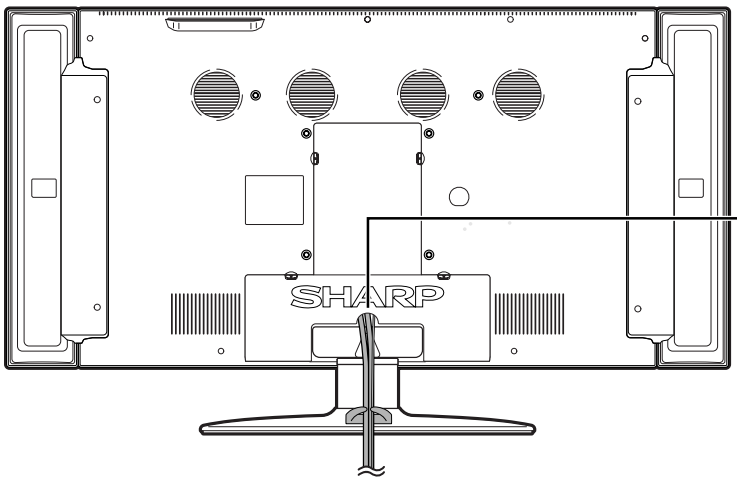
Display (rear view)



NOTE

- The small clamp on the right is used for bundling external speakers. (See page 46.)

5 Closing the terminal cover



Cables come out from the small opening.

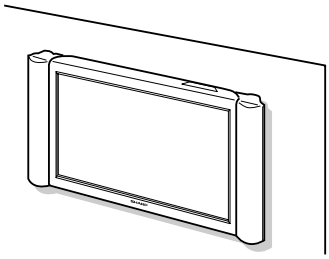
Setting the Display on the wall

Using an optional bracket to mount the Display

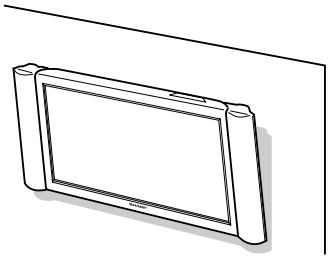
- You can ask a qualified service personnel about using an optional AN-37AG1 bracket to mount the Display to the wall.
- Carefully read the instructions that come with the bracket before beginning work.

Hanging on the wall

AN-37AG1 wall mount bracket. (See the bracket instructions for details.)



Vertical mounting



Angular mounting

CAUTION

- Installing the LCD Colour TV requires special skill that should only be performed by qualified service personnel. Customers should not attempt to do the work themselves. SHARP bears no responsibility for improper mounting or mounting that results in accident or injury.

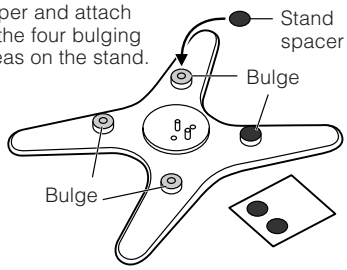
Setting the AVC System with the stand

How to install the AVC System vertically using the stand unit.

- Use the supplied stand unit for installing the AVC System vertically in an upright position.

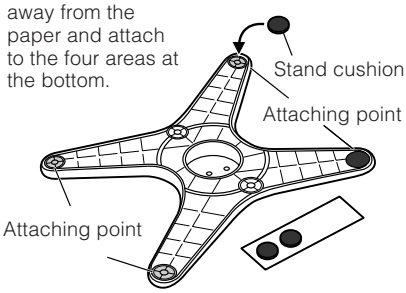
1 Stick each spacer to the stand as shown.

Peel each spacer away from the paper and attach to the four bulging areas on the stand.



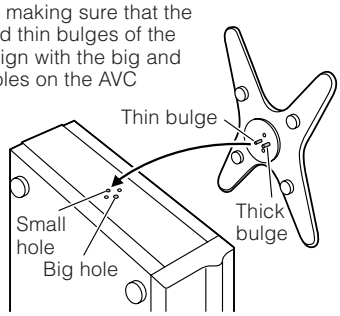
2 Attach each cushion to the stand as shown.

Peel each cushion away from the paper and attach to the four areas at the bottom.

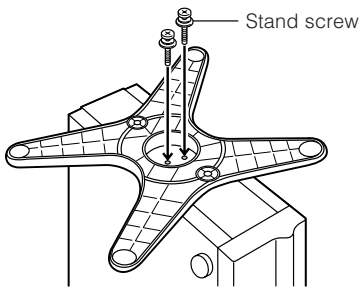


3 Fit the stand to the AVC System.

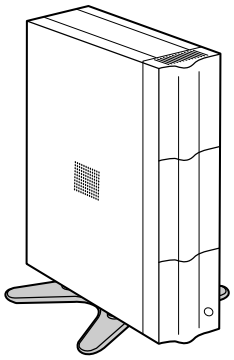
Insert the stand into the AVC System, making sure that the thick and thin bulges of the stand align with the big and small holes on the AVC System.



4 Attach the stand using the stand screws as shown.



The AVC System installed vertically with the stand.



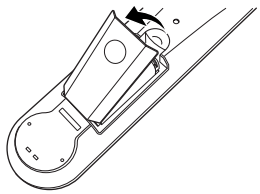
NOTE

- When mounting the AVC System vertically, always use the supplied stand. Be careful not to block vent holes when standing up directly on the floor or a flat surface as this can result in equipment failure.

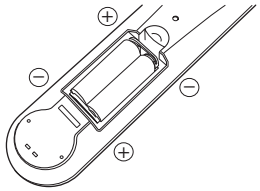
Inserting the batteries

Before using the System for the first time, insert two LR6 (“AA” size) Alkaline batteries (supplied). When the batteries become depleted and the remote control fails to operate, replace the batteries with new LR6 (“AA” size) Alkaline batteries.

1 Open the battery cover.

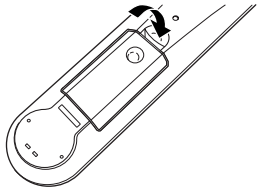


2 Insert two supplied LR6 (“AA” size) Alkaline batteries.



- Place batteries with their terminals corresponding to the (+) and (−) indications in the battery compartment.

3 Close the battery cover.



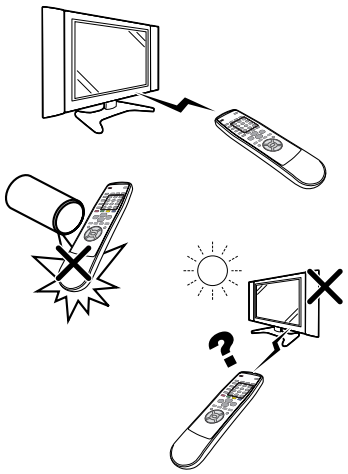
CAUTION

Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below.

- Do not use manganese batteries. When you replace the batteries, use alkaline ones.
- Place the batteries with their terminals corresponding to the (+) and (−) indications.
- Do not mix batteries of different types. Different types of batteries have different characteristics.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as they have worn out. Chemicals that leak from batteries can cause a rash. If you find any chemical leakage, wipe thoroughly with a cloth.
- The batteries supplied with this product may have a shorter life expectancy due to storage conditions.
- If you will not be using the remote control unit for an extended period of time, remove the batteries from it.

Using the remote control unit

Use the remote control unit by pointing it towards the remote sensor window. Objects between the remote control unit and sensor window may prevent proper operation.

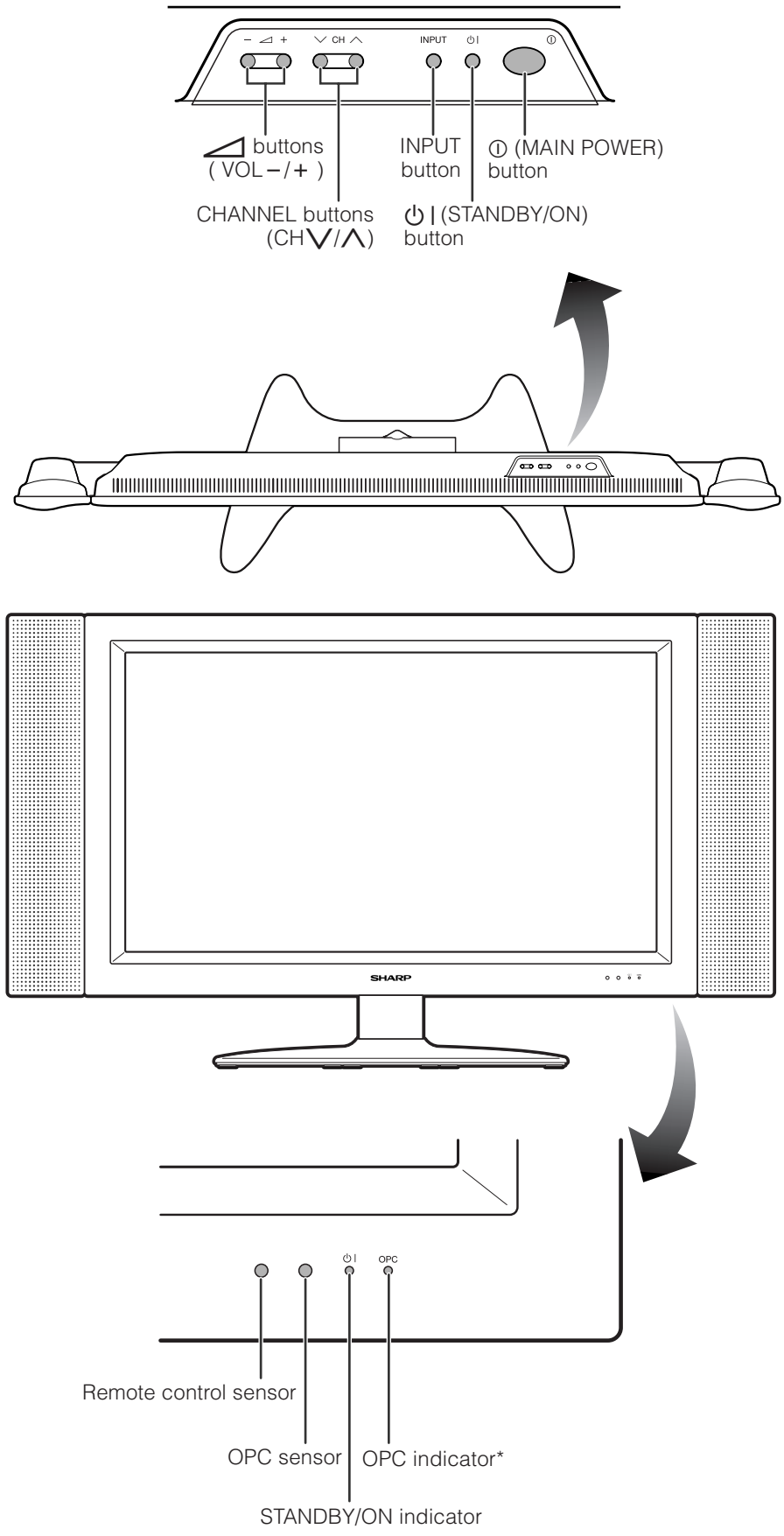


Cautions regarding remote control unit

- Do not expose the remote control unit to shock.
  In addition, do not expose the remote control unit to liquids, and do not place in an area with high humidity.
- Do not install or place the remote control unit under direct sunlight.
  The heat may cause deformation of the unit.
- The remote control unit may not work properly if the remote sensor window of the Display is under direct sunlight or strong lighting. In such case, change the angle of the lighting or Display, or operate the remote control unit closer to the remote sensor window.

Part names

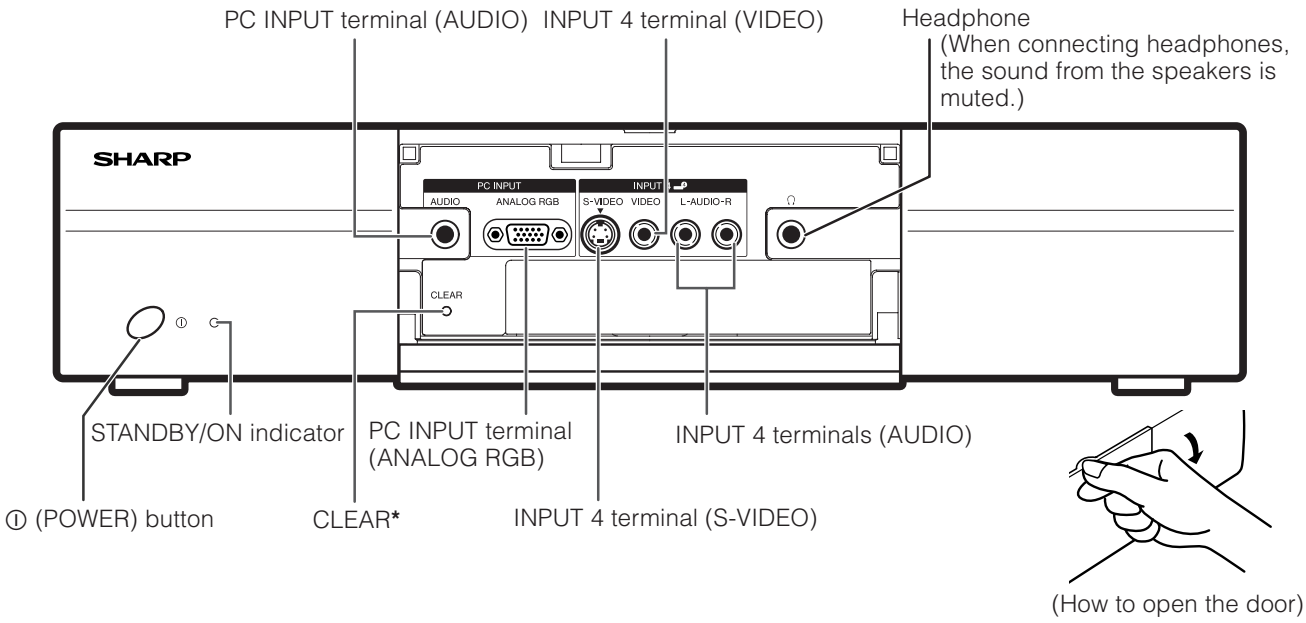
Display



*OPC: Optical Picture Control
(See Pages 37 and 39.)

AVC System

Front view



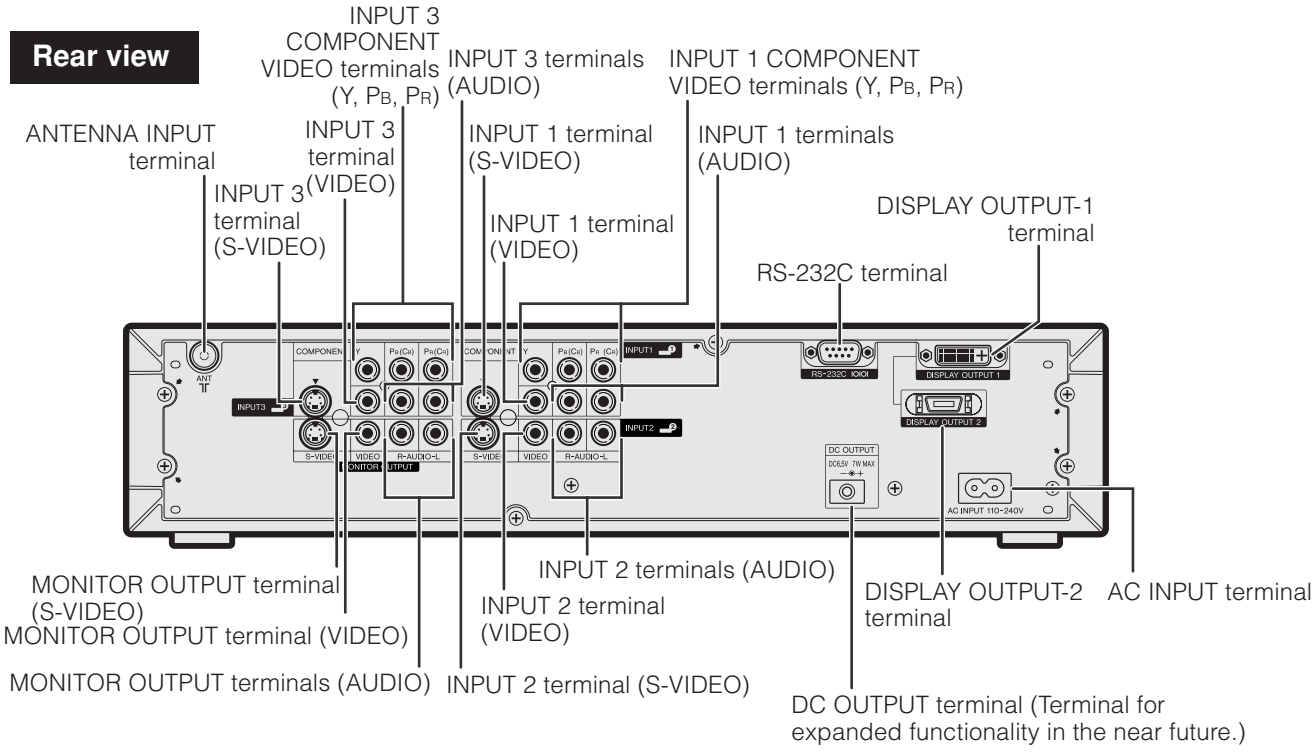
* If the AVC System is switched on but it does not appear to be operating correctly, it may need resetting. In this case, press **CLEAR**, shown in the diagram, lightly with the end of a ballpoint pen or other pointed object. This will reset the System as shown below.

- AV MODE resets to USER.
- TV channel resets to channel 1.
- Dual screen resets to normal.
- Audio setting initialises.
- SRS resets to OFF.
- Image position is initialised.

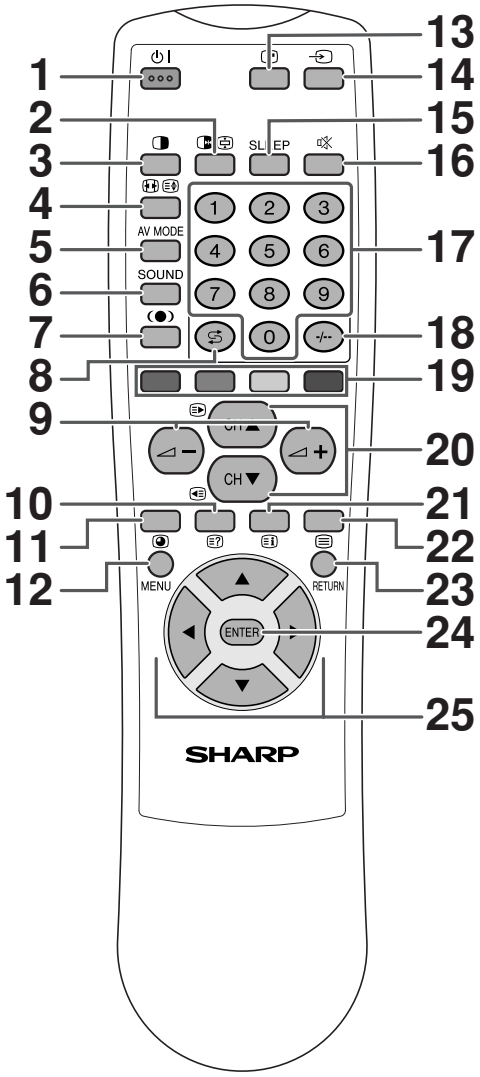
NOTE

- Pressing **CLEAR** will not work if the System is in standby mode (indicator lights red).
- Pressing **CLEAR** will not delete channel preset or password. See page 60 for clearing the password when you know it. See page 73 for initialising to the factory preset values when you forget your password.

Rear view


INPUT 3 COMPONENT VIDEO terminals (Y, PB, PR)
INPUT 3 terminals (AUDIO)
INPUT 1 COMPONENT VIDEO terminals (Y, PB, PR)
ANTENNA INPUT terminal
INPUT 3 terminal (VIDEO)
INPUT 1 terminal (S-VIDEO)
INPUT 1 terminals (AUDIO)
INPUT 3 terminal (S-VIDEO)
INPUT 1 terminal (VIDEO)
DISPLAY OUTPUT-1 terminal
RS-232C terminal
INPUT 2 terminals (AUDIO)
MONITOR OUTPUT terminal (S-VIDEO)
INPUT 2 terminal (VIDEO)
DISPLAY OUTPUT-2 terminal
AC INPUT terminal
MONITOR OUTPUT terminal (VIDEO)
MONITOR OUTPUT terminals (AUDIO)
INPUT 2 terminal (S-VIDEO)
DC OUTPUT terminal (Terminal for expanded functionality in the near future.)

Remote control unit



NOTE

- When using the remote control unit, point it at the Display.

* SRS(●) FOCUS is a trademark of SRS Labs, Inc. FOCUS technology is incorporated under license from SRS Labs, Inc.

1 **⏻ | (STANDBY/ON)**
To switch the power on and off. (See page 16.)

2 **(FREEZE/HOLD for TELETEXT)**
TV/External input mode: Change the still image mode.
TELETEXT mode: Freeze a multi-page on screen while other pages are automatically updated. Press again to return to the normal image. (See pages 62 and 63.)

3 **(DUAL screen)**
Set the dual picture mode. Press again to return to normal view. (See page 61.)

4 **(WIDE MODE/ T/B/F)**
TV/External input mode: Change the wide image mode. (See pages 53 and 54.)
TELETEXT mode: Set the area of magnification. (full/upper half/ lower half) (See page 63.)

5 **AV MODE**
Select a video setting: AV MODE (STANDARD, DYNAMIC, MOVIE, GAME, USER), PC MODE (STANDARD, USER) (See page 52.)

6 **SOUND**
Select the sound multiplex mode. (See page 20.)

7 **(●) (SRS and FOCUS)***
Select SRS and FOCUS sound system. (See page 19.)

8 **(Flashback)**
Press to return to the previous channel in normal viewing mode. Press to return to the previous page in TELETEXT mode. (See page 17.)

9 **– / + (VOLUME)**
Set the volume. (See page 18.)

10 **(Reveal hidden for TELETEXT)**
TELETEXT mode: Display hidden characters. (See page 63.)

11 **(SUBPAGE for TELETEXT)**
TELETEXT mode: Change the picture mode for sub-page selecting. (See page 64.)

12 **MENU**
Display the MENU screen.

13 **(CHANNEL INFORMATION)**
Display the channel information and time. (See page 65 for details on the time display.)

14 **(INPUT SOURCE)**
Select an input source. (TV, INPUT 1, INPUT 2, INPUT 3, INPUT 4, PC) (See pages 41-45 and 51.)

15 **SLEEP**
Set the Sleep timer. (See page 58.)

16 **(MUTE)**
Mute the sound. (See page 18.)

17 **0 – 9**
TV/External input mode: Set the channel.
TELETEXT mode: Set the page.

18 **-/-- (Digit for channel select)**
Change the digits of the selected TV channel. (See page 17.)

19 **Colour (RED/GREEN/YELLOW/BLUE)**
TELETEXT mode: Select a page. (See page 63.)

20 **CH▲/CH▼(/)**
TV/External input mode: Select the channel.
TELETEXT mode: Set the page. (See page 63.)

21 **(TOP Overview for TELETEXT)**
TELETEXT mode: Display an index page for CEEFAX/FLOF information. TOP Overview for TOP programme. (See page 64.)

22 **(TELETEXT)**
Select the TELETEXT mode. (all TV image, all TEXT image, TV/TEXT image) (See pages 63 and 64.)

23 **RETURN**
MENU mode: Return to the previous menu screen.

24 **ENTER**
Execute a command.
Return to the initial image position after moving with ▲/▼/◀/▶.

25 **▲/▼/◀/▶ (Cursor)**
Select a desired item on the setting screen.
Move the picture on the screen.

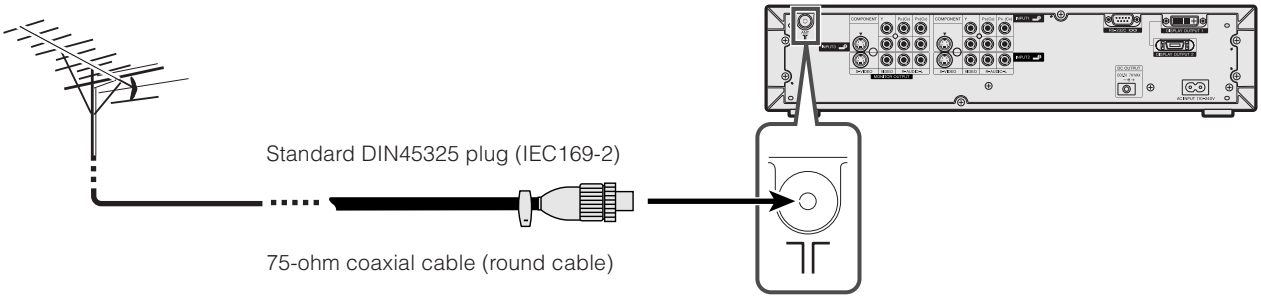
Watching TV

Simple operations for watching a TV programme

Basic connection

Connecting to an antenna

To enjoy a clearer picture, use an outdoor antenna. The following is a brief explanation of the types of connections that are used for coaxial cable.

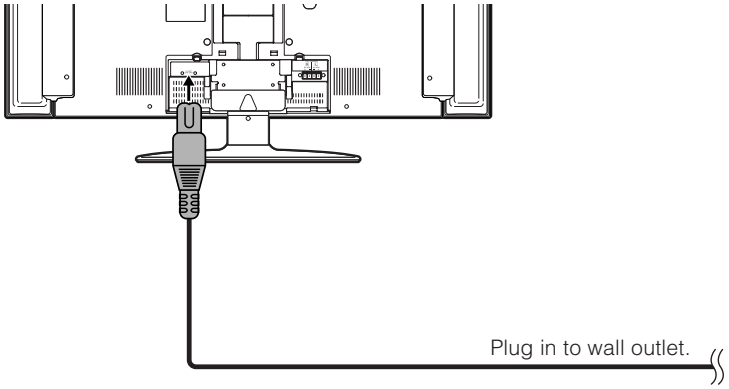


Antenna cable

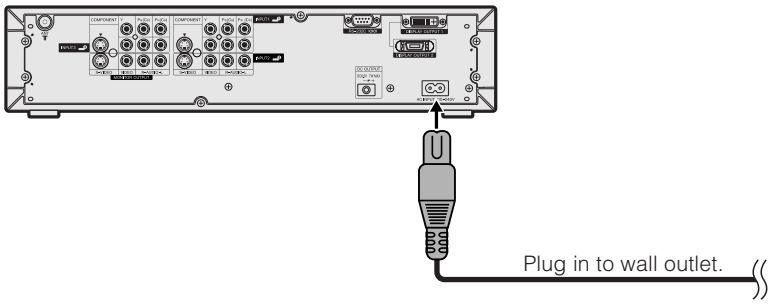
If your outdoor antenna uses a 75-ohm coaxial cable with a standard DIN45325 plug (IEC 169-2), plug it into the ANTENNA INPUT terminal at the rear of the AVC System.

Connecting to the power outlet

Display (rear view)



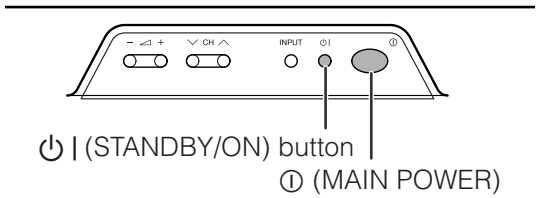
AVC System (rear view)

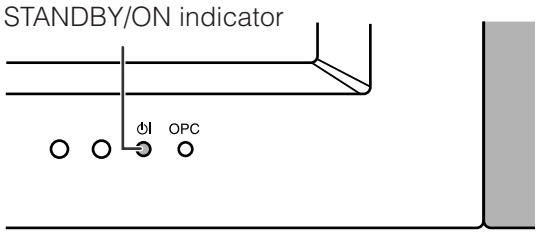


NOTE

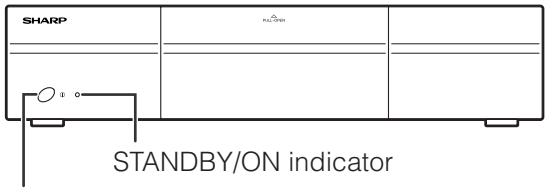
- Always turn off the main power of Display and AVC System when connecting the AC cords.
- Disconnect the AC cords from the AC outlet, Display and AVC System if the System will not be used for a long period of time.

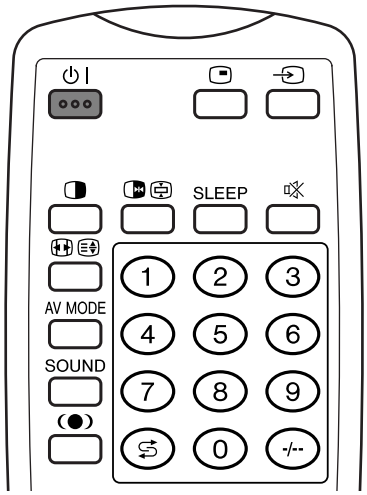
Display





AVC System





Turning on the power

1 Press ⏻ (MAIN POWER) on the Display.
- The STANDBY/ON indicator on the Display flashes red.

2 Press ⏻ (POWER) on the AVC System.
- The System turns the power on.
- The STANDBY/ON indicator on the Display lights up green and the one on the AVC System lights up green.
- If the STANDBY/ON indicators still light up red, press ⏻ | on the remote control unit or ⏻ | (STANDBY/ON) button on the Display to turn the System on.

When turning the AVC System on first

1 Press ⏻ (POWER) on the AVC System.
- The STANDBY/ON indicator on the AVC System lights up red.

2 Press ⏻ (MAIN POWER) on the Display.
- The System turns the power on.
- The STANDBY/ON indicator on the Display lights up green and the one on the AVC System lights up green.
- If the STANDBY/ON indicators still light up red, press ⏻ | on the remote control unit or ⏻ | (STANDBY/ON) button on the Display to turn the System on.

Turning off the power

1 Press ⏻ | on the remote control unit or ⏻ | (STANDBY/ON) button on the Display.
- The System enters standby mode and the image on the screen disappears.
- Both STANDBY/ON indicators change from green to red.

2 Press ⏻ (POWER) on the AVC System.
- The STANDBY/ON indicator on the AVC System turns off and the one on the Display flashes red.

3 Press ⏻ (MAIN POWER) on the Display.
- The STANDBY/ON indicator on the Display gradually turns off.

NOTE

- If you are not going to use this System for a long period of time, be sure to remove the AC cords from the power outlet.
- Weak electric power is still consumed even when both ⏻ (MAIN POWER) and ⏻ (POWER) are turned off.
- When the STANDBY/ON indicator lights up red, it takes about 10 to 15 seconds for the indicator to turn off if ⏻ (POWER) on the AVC System is turned “Off” or the AC cord is unplugged from the AC outlet.

Display status indicator

Off	Power off
Flashing red	AVC System does not turn on or its AC cord is disconnected.
Red	The System is in standby mode.
Green	The System is on.

AVC System status indicator

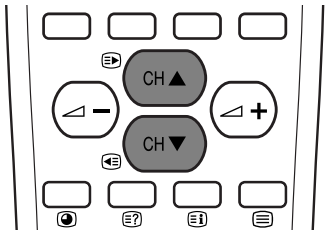
Off	Power off
Red	Only the AVC System is in standby mode or the System is in standby mode.
Green	The System is on.

Simple button operations for changing channels

You can change channels in several ways.

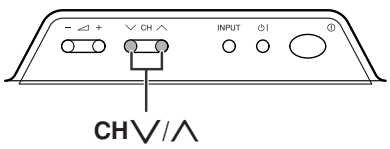
Using CH▲/▼on the remote control unit

- Press **CH▲** to increase channel number.
- Press **CH▼** to decrease channel number.



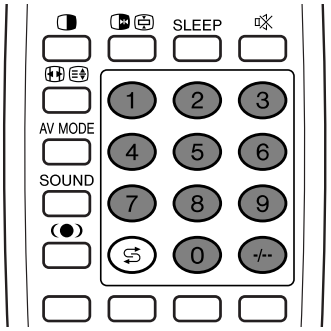
NOTE

- **CH⋁/⋀** on the Display operates the same as **CH▼/▲**on the remote control unit.



Using 0 – 9 on the remote control unit

Select the channels directly by pressing buttons **0** to **9**.



EXAMPLE

To select a 1-digit channel (e.g. channel 2):

- Press **2**. If "2" is indicated and the picture does not change, press **-/--** to switch over to the 1-digit select mode and press **2** again.

To select a 2-digit channel (e.g. channel 12):

- Press **-/--** to set the 2-digit select mode. Press **1**, followed by **2**.

NOTE

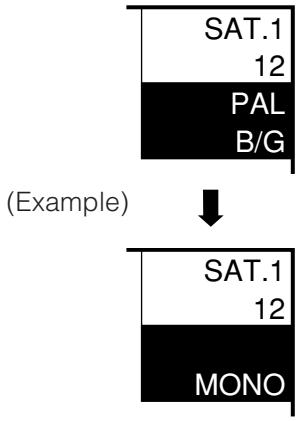
- Complete this procedure within 3 seconds, otherwise the selection will not be made on the 2-digit channel mode.

When viewing Teletext information

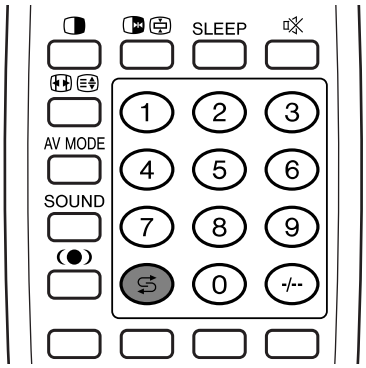
View a page directly which is 3-digit page number from 100 to 899 by pressing buttons **0** to **9**. With Teletext, you do not use **-/--**. (See page 64).

Channel display

Channel display changes approximately after 3 seconds as shown below.



Using Flashback (⇆) on the remote control unit

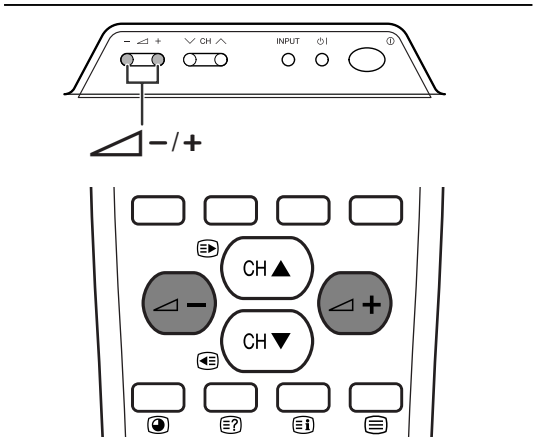


Press ⇆ to switch the currently tuned channel to the previously tuned channel.
Press ⇆ again to switch back to the currently tuned channel.

Simple button operation for changing volume/sound

Changing the volume

You can change the volume on the Display or on the remote control unit.



- To increase the volume, press +.
- To decrease the volume, press −.

NOTE

- "TV", "INPUT1", "INPUT2", "INPUT3", "INPUT4" and "PC" modes can each store volume adjustment values separately.

When "Audio Out" is set to "Variable", the indicator on the screen changes as shown below.

Audio status

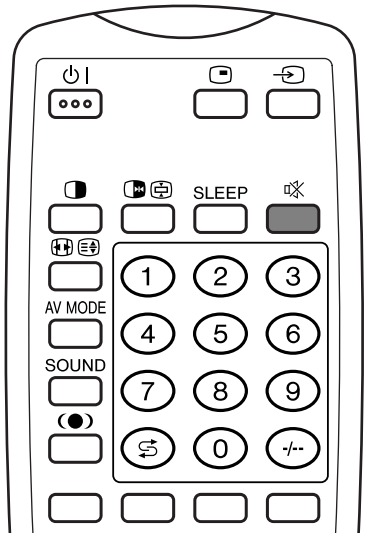
Output device	Audio out	
	Fixed	Variable
Speaker	Variable sound	Mute
MONITOR OUTPUT	Constant as specified	Variable sound

NOTE

- See page 58 for details on the audio out function.

Using 🔇 on the remote control unit

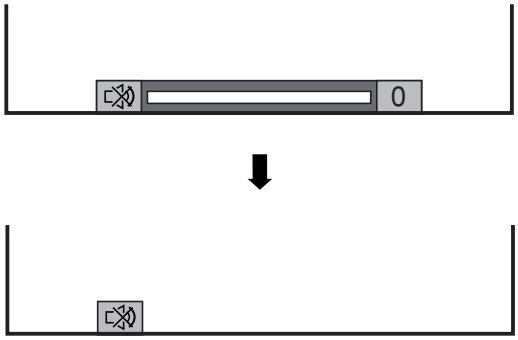
🔇 mutes the current sound output.



1 Press 🔇.

- "🔇" has been displayed on the screen for 30 minutes, and the sound is silenced.

Mute



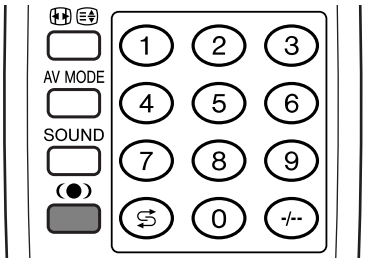
NOTE

- Within 30 minutes of pressing 🔇, mute can be cancelled by using one of the two methods below.
  - Pressing −/+, **SOUND**, **CH▲/CH▼**, **0** – **9**, ⏎ or ⇄ can also cancel the mute.
  - Changing channels can also cancel the mute.
- **Mute will be cancelled after 30 minutes have elapsed. However, the System will not suddenly output a loud sound as the volume level is set to 0 automatically.**

2 Within 30 minutes, Press 🔇 again to cancel the mute.

- Before 30 minutes, the volume level returns to the previous setting.
- After 30 minutes, increase the volume level by pressing +.

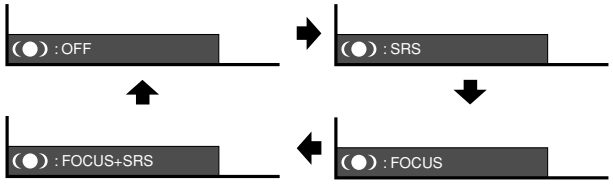
Using (●) on the remote control unit



(●) produces SRS and FOCUS effect from the speakers.
Each time you press (●), the mode changes among SRS, FOCUS, FOCUS + SRS and OFF.

SRS sound options

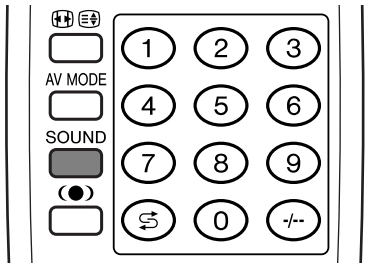
- SRS (Sound Retrieval System): Creates more a natural sound retrieving the spatial information from any stereo recording and restoring the original three-dimensional sound field.
- FOCUS: Repositions a sound image from two speakers to a more optimal listening position or height without moving them.
- FOCUS + SRS: Produces both SRS and FOCUS effects.
- OFF: Outputs the normal sound.



NOTE

- You can have the same settings by choosing “Surround” on the menu items. (See page 36.)

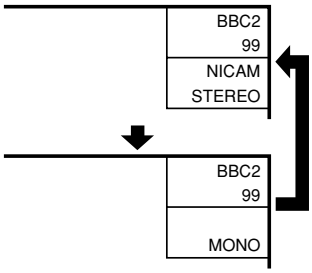
Using SOUND on the remote control unit



In the NICAM TV broadcasts

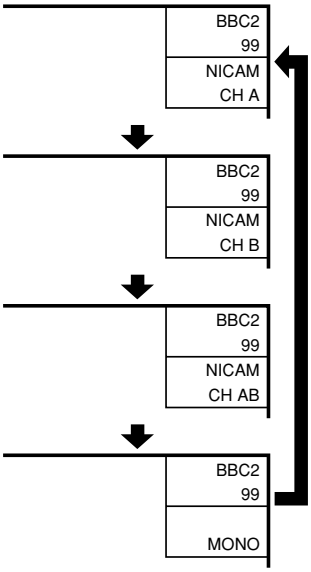
When receiving a stereo signal
Each time you press **SOUND**, the mode switches between NICAM STEREO and MONO.

Stereo mode



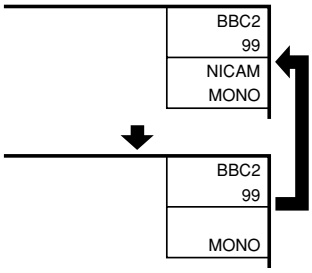
When receiving a bilingual signal
Each time you press **SOUND**, the mode switches among NICAM CH A, NICAM CH B, NICAM CH AB and MONO.

Bilingual mode



When receiving a monaural signal
Each time you press **SOUND**, the mode switches between NICAM MONO and MONO.

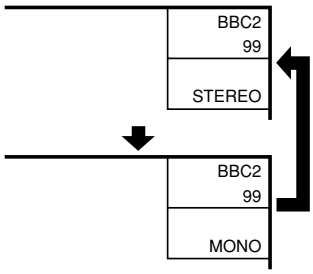
Monaural mode



In the TV mode of IGR TV broadcasts

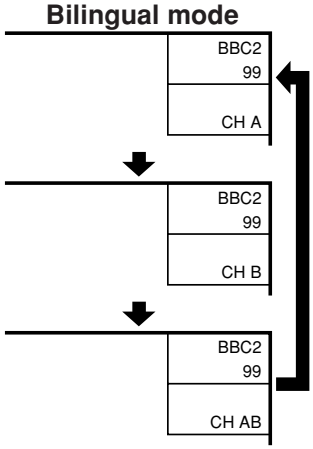
When receiving a stereo signal
Each time you press **SOUND**, the mode switches between STEREO and MONO.

Stereo mode



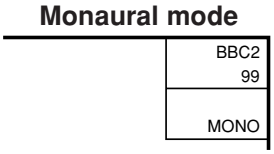
When receiving a bilingual signal
Each time you press **SOUND**, the mode switches among CH A, CH B and CH AB.

Bilingual mode



When receiving a monaural signal
When you press **SOUND**, "MONO" displays.

Monaural mode



NOTE

- When no signal is input, the sound mode will display "MONO".
- "BBC2" and "99" are tentative network name and channel.

Basic adjustment settings

AV input mode menu items

List of AV menu items to help you with operations

Picture

Contrast ..... Page 31
Brightness ..... Page 31
Colour ..... Page 31
Tint ..... Page 31
Sharpness ..... Page 31
Advanced
C.M.S. ..... Page 32
Colour Temp ..... Page 33
Black ..... Page 33
Monochrome ..... Page 34
Film Mode ..... Page 34
I/P Setting ..... Page 35
DNR ..... Page 35

Audio

Treble ..... Page 36
Bass ..... Page 36
Balance ..... Page 36
Surround ..... Page 36
Speaker ..... Page 47

Power Control

Power Save ..... Page 37
No Signal Off ..... Page 38
No Operation Off ..... Page 38

Setup

Auto Installation ..... Pages 22-23
Programme Setup ..... Pages 24-29
Child Lock ..... Page 60
Position ..... Page 48
WSS ..... Page 56
4:3 Mode ..... Page 56
Rotate ..... Page 57
Language ..... Page 30
Text Lang. ..... Page 62

Option

Input Select ..... Page 51
Audio Out ..... Page 58
Cool Climate ..... Page 59
Colour System ..... Page 52

PC input mode menu items

List of PC menu items to help you with operations

Picture

Contrast ..... Page 31
Brightness ..... Page 31
Red ..... Page 31
Green ..... Page 31
Blue ..... Page 31
C.M.S. ..... Page 32

Audio

Treble ..... Page 36
Bass ..... Page 36
Balance ..... Page 36
Surround ..... Page 36
Speaker ..... Page 47

Power Control

Power Save ..... Page 39
Power Management ..... Page 39

Setup

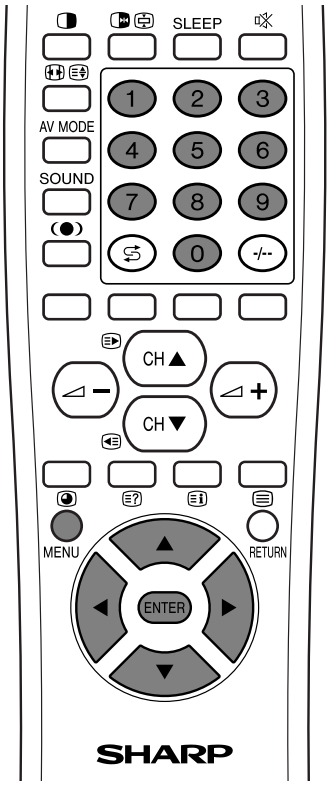
Input Signal ..... Page 55
Auto Sync. ..... Page 50
Fine Sync. ..... Page 50
Rotate ..... Page 57
Language ..... Page 30

Option

Audio Out ..... Page 58
Cool Climate ..... Page 59

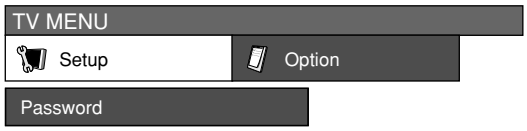
Auto installation

You can run auto installation, even after setting up the preset channels.



1 Press **MENU** and the TV MENU screen displays.

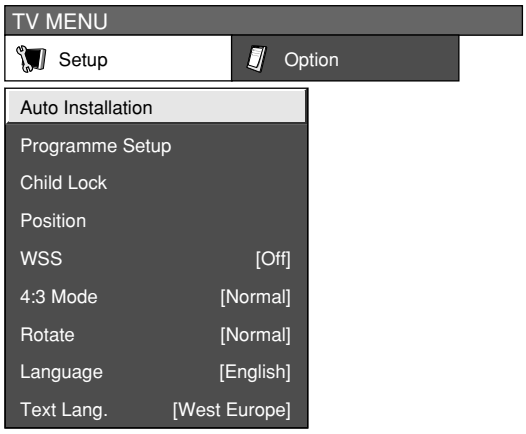
2 Press ◀/▶ to select “Setup”.
If you already set the password for child lock, go to step 3. If not, skip to step 4.
• See page 60 for setting password.



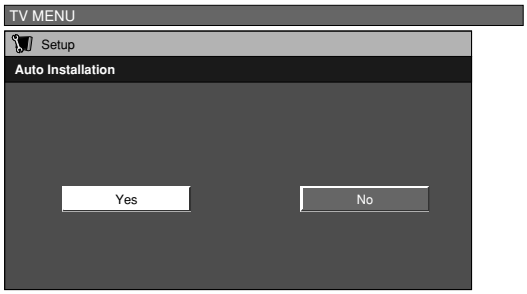
3 Press ▲/▼ to select “Password”, and then press **ENTER**.

Enter your 4-digit password with **0** - **9** on the remote control unit.

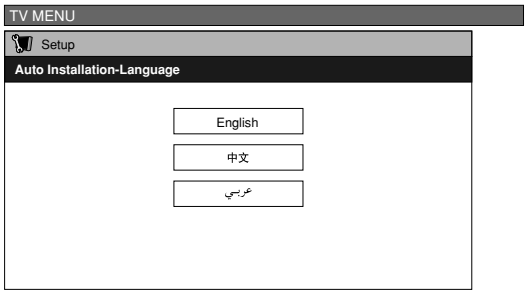
4 Press ▲/▼ to select “Auto Installation”, and then press **ENTER**.



5 Press ◀/▶ to select “Yes”, and then press **ENTER**.



6 Press ▲/▼ to select the desired language listed on the screen, and then press **ENTER**.



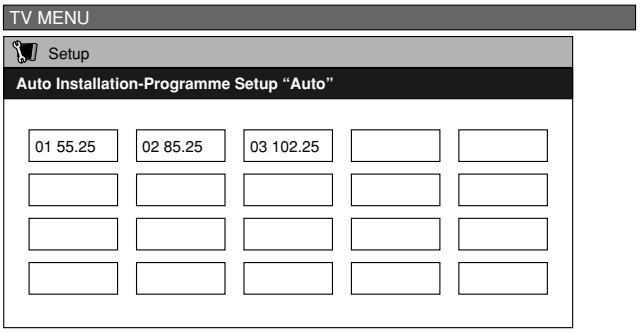
After this setting, auto search starts with the following order.
① Automatic channel searching
② Automatic channel labelling
③ Automatic channel sorting
You do not need to do anything during the auto search. (Go to the next page.)

NOTE

- The illustrations and on-screen displays in this manual are for explanation purposes and may vary slightly from the actual operations.

Automatic channel searching

Channel auto search finds all channels viewable in your area.

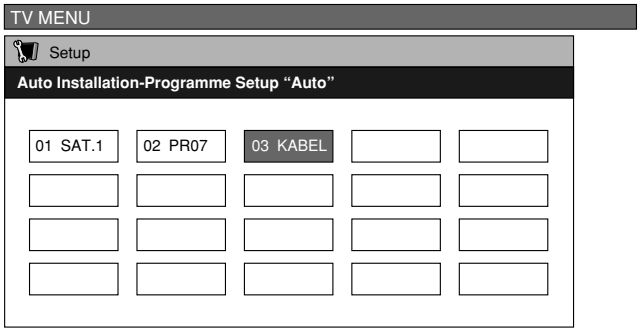


NOTE

- If no channel is found, “No programme found.” displays. And the auto installation finishes.

Automatic channel labelling

After finding TV channels, the System starts naming each TV channel found.

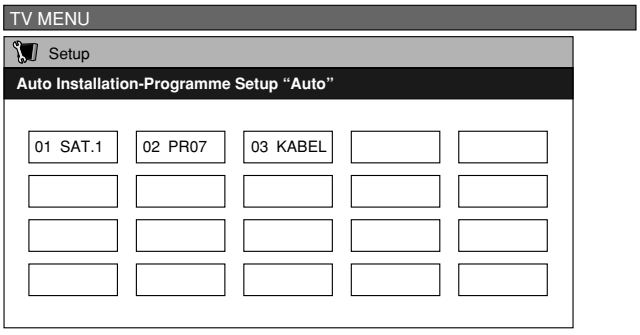


NOTE

- The System can only name channels where the channel labelling information is provided. If channel information is not provided, the System displays “-----”.

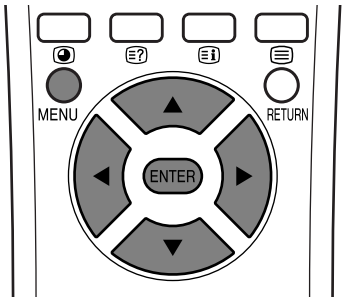
Automatic channel sorting

When channel auto labelling finishes, the System starts sorting the labelled channels.



Programme setup

You can run the auto installation procedure again at any time, by accessing the Setup menu, then Programme Setup. Channels can be tuned automatically or manually.



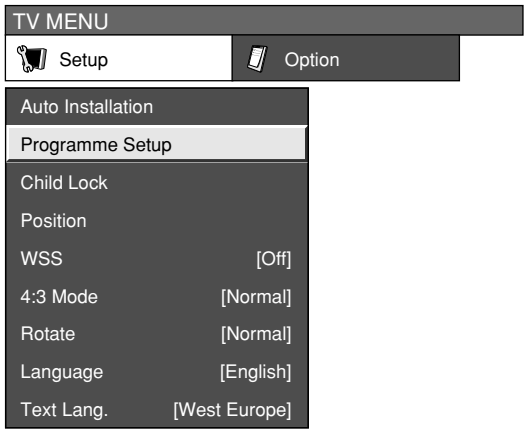
Auto search

You can also automatically search TV channels by performing the procedure below. This is the same function as from “Automatic channel searching” to “Automatic channel sorting” in auto installation on page 23.

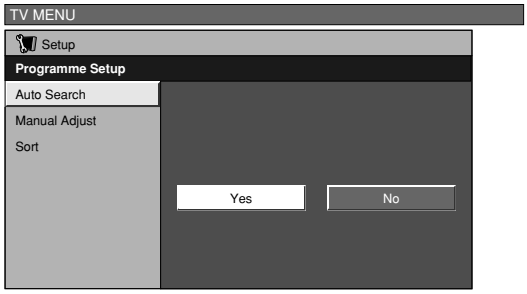
1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Setup”.
- If password is already set, you are asked to enter it. Follow the same steps as explained in “Auto installation”. (See steps 2 and 3 on page 22.)

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.



4 Press ▲/▼ to select “Auto Search”, and then press **ENTER**.

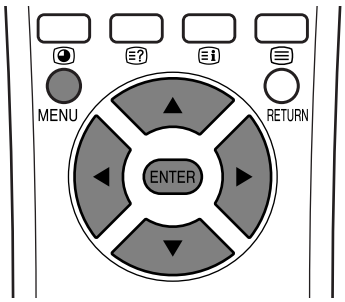


5 Press ◀/▶ to select “Yes”, and then press **ENTER**.
- Auto search starts with the following order.
  ① Automatic channel searching
  ② Automatic channel labelling
  ③ Automatic channel sorting

NOTE
- See page 23 for details.

Manual setting for each channel

You can set some channel items manually. They are Search, Fine (TV frequency), Colour sys., Sound sys., Label (Network name), Skip and Lock (Child Lock).

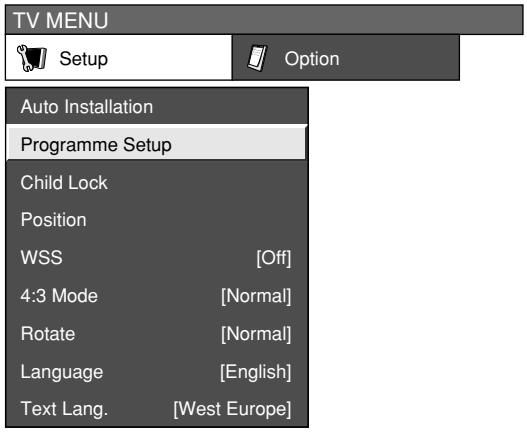


1 Press **MENU** and the TV MENU screen displays.

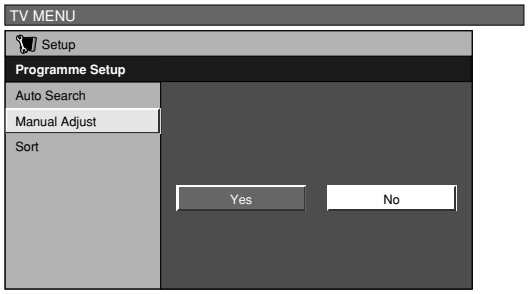
2 Press ◀/▶ to select “Setup”.

- If password is already set, you are asked to enter it. Follow the same steps as explained in “Auto installation”. (See steps 2 and 3 on page 22.)

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.

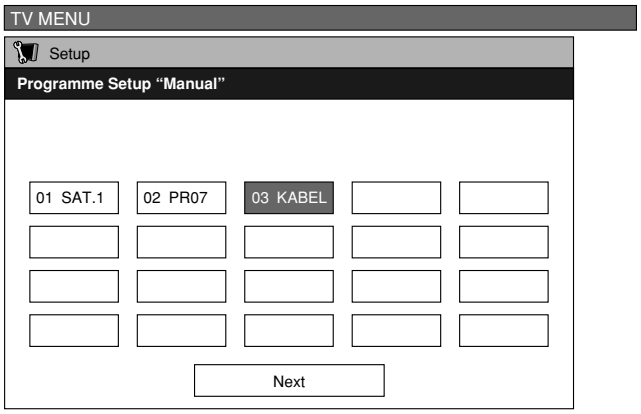


4 Press ▲/▼ to select “Manual Adjust”, and then press **ENTER**.



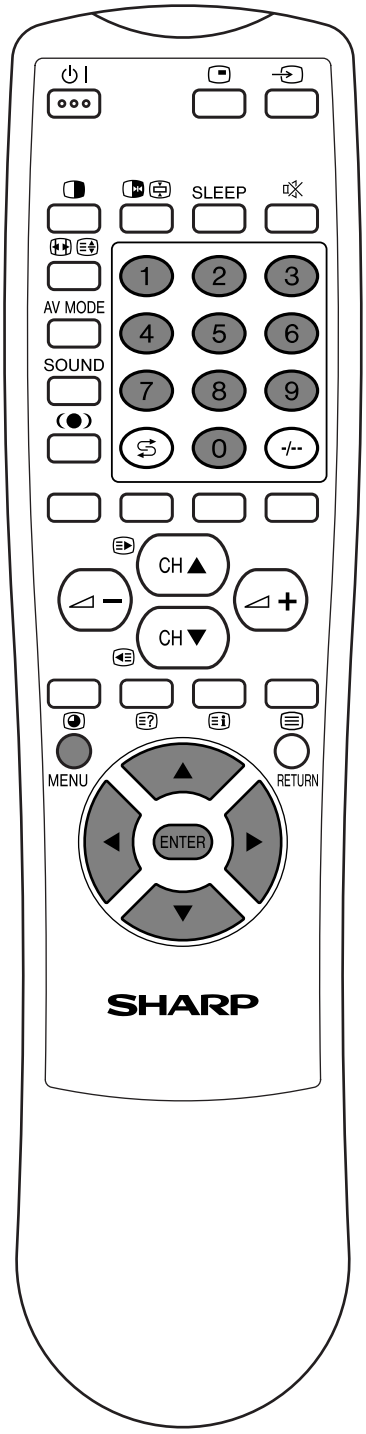
5 Press ◀/▶ to select “Yes”, and then press **ENTER**.

Programme Setup “Manual” menu



You can select one of the following settings.

① Search (See page 26.)
② Fine (See page 26.)
③ Colour system (See page 27.)
④ Sound system (See page 27.)
⑤ Label (See page 27.)
⑥ Skip (See page 28.)
⑦ Lock (See page 28.)

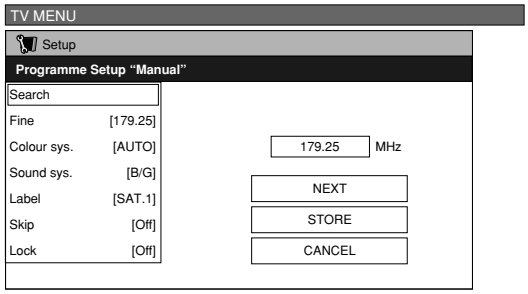


Manual setting for each channel (continued)

Search tuning

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Search”, and then press **ENTER**.



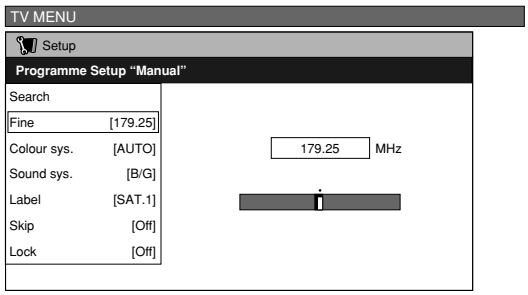
3 Press ▲/▼ to select item and press **ENTER**.
- **NEXT**: Search the next channel.
- **STORE**: Memorise the current display channel.
- **CANCEL**: Returns to the previous screen. (The search result is not stored.)

Fine tuning

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Fine”, and then press **ENTER**.

3 Press ◀/▶ to adjust the frequency, and then press **ENTER**.
- Adjust while checking the background picture as a reference.

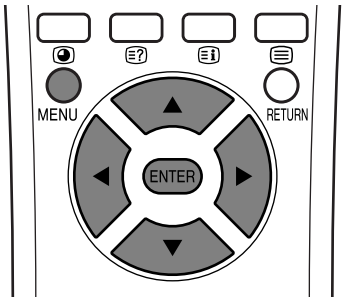


- Instead of the above, you can also set by directly entering the frequency number of the channel with **0** – **9**.

EXAMPLE
- 179.25 MHz: Press **1** → **7** → **9** → **2** → **5** → **ENTER**.
- 49.25 MHz: Press **4** → **9** → **2** → **5** → **ENTER**.

Manual setting for each channel (continued)

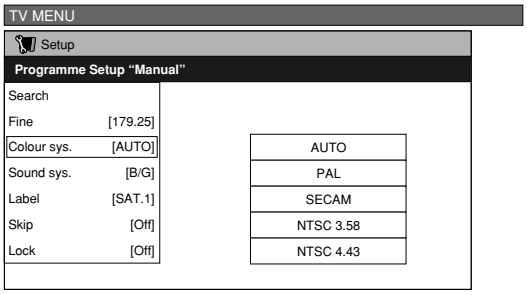
Colour system



1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Colour sys.”, and then press **ENTER**.
- Receivable colour systems are listed.

Colour system menu



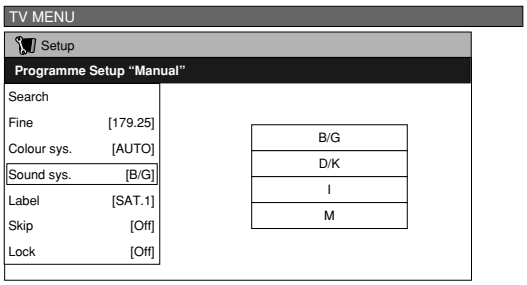
3 Press ▲/▼ to select the optimum colour system, and then press **ENTER**.

Sound system (Broadcasting system)

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Sound sys.”, and then press **ENTER**.
- Receivable sound systems (Broadcasting systems) are listed.

Sound menu



3 Press ▲/▼ to select the optimum sound system, and then press **ENTER**.

NOTE

- If you adjust this setting, please check the colour system information. (See left column.)

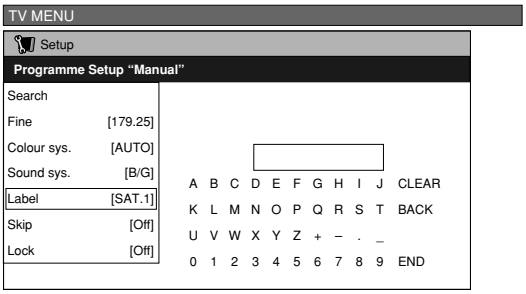
Labelling channels

When a TV channel sends its Network Name, the auto installation detects the information and assigns a name to it. However, you can change individual channel names.

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Label”, and then press **ENTER**.
- Alphabets and numbers are listed.

Labelling menu

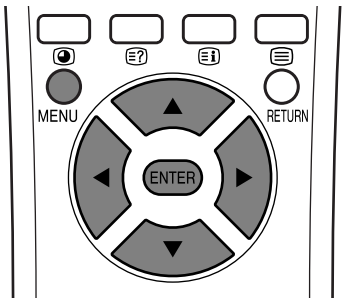

TV MENU
Setup
Programme Setup “Manual”
Search
Fine [179.25]
Colour sys. [AUTO]
Sound sys. [B/G]
Label [SAT.1]
Skip [Off]
Lock [Off]
A B C D E F G H I J CLEAR
K L M N O P Q R S T BACK
U V W X Y Z + – . _
0 1 2 3 4 5 6 7 8 9 END

3 Press ▲/▼/◀/▶ to select each character of the new name for the channel, and then press **ENTER**.

4 Repeat the above until the name is fully spelt out.
- The name can be 5 characters or less.

Manual setting for each channel (continued)

Skipping channels

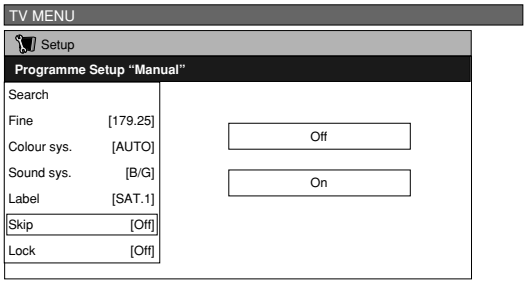


Channels with “Skip” set to “On” are passed over when using **CH▲/CH▼** even if selected while watching the image from the TV.

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Skip”, and then press **ENTER**.
- Skip menu displays.

Skip menu



3 Press ▲/▼ to set “Skip” to “On”, and then press **ENTER**.

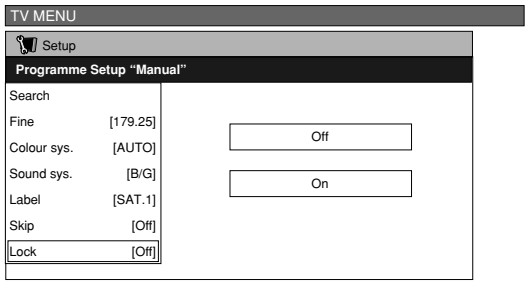
Setting the child lock

You can block the viewing of any channel.

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Lock”, and then press **ENTER**.
- Child lock menu displays.

Lock menu



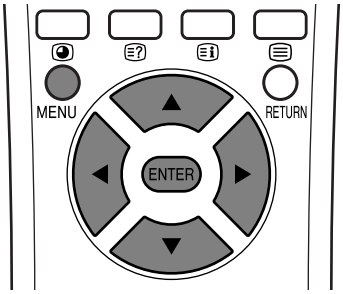
3 Press ▲/▼ to set “Lock” to “On”, and then press **ENTER**.

NOTE

- Even when this function is switched “On”, it will not work if a password has not been set. See page 60 for details on password setting.
- When “Lock” is set to “On” for a channel, “Child Lock Has Been Activated.” displays , and the image and sound of the channel is blocked.
- When pressing **ENTER** while “Child Lock Has Been Activated.” displays, password input menu will display. Inputting the correct password lifts the child lock temporarily until the power is turned off.

Sort

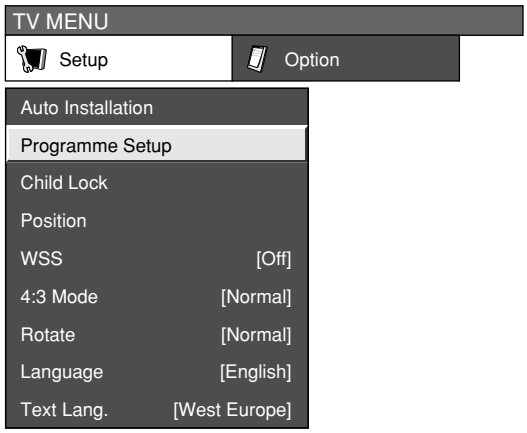
Channel positions can be sorted freely.



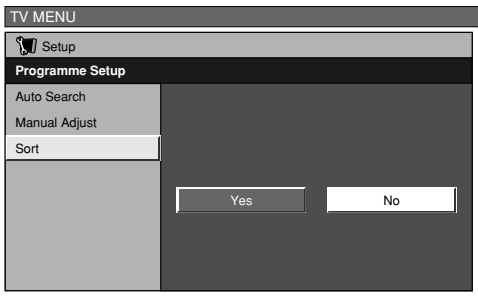
1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Setup”.
- If password is already set, you are asked to enter it. Follow the same steps as explained in “Auto installation”. (See steps 2 and 3 on page 22.)

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.



4 Press ▲/▼ to select “Sort”, and then press **ENTER**.
- The channels are listed. Black ones are set “Skip” to “Off” and blue are set “Skip” to “On”.



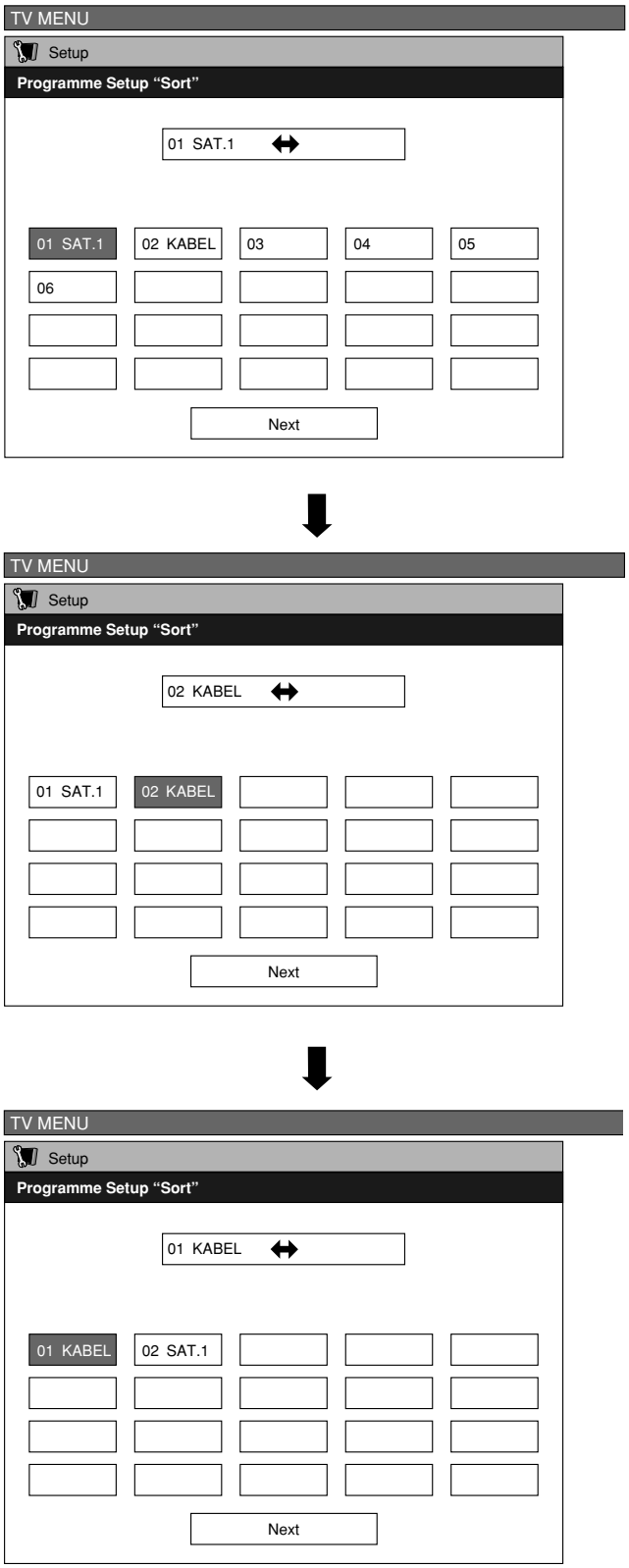
5 Press ◀/▶ to select “Yes”, and then press **ENTER**.

6 Press ▲/▼/◀/▶ to select the channel you want to move, and then press **ENTER**.

7 Move it to the desired position by pressing ▲/▼/◀/▶, and then press **ENTER**.

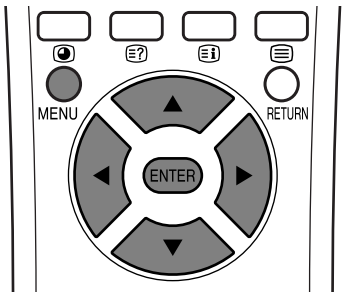
8 Repeat the steps 6 and 7 until all desired channels are sorted.

Sort menus



Language setting for on-screen display

You can also select a language from setup menu. Select from among 3 languages: English, Chinese and Arabic.

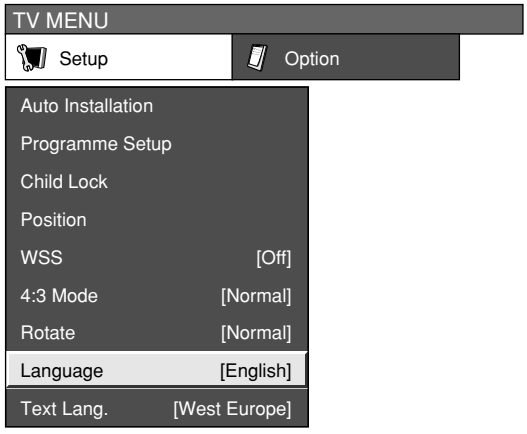


AV Input mode

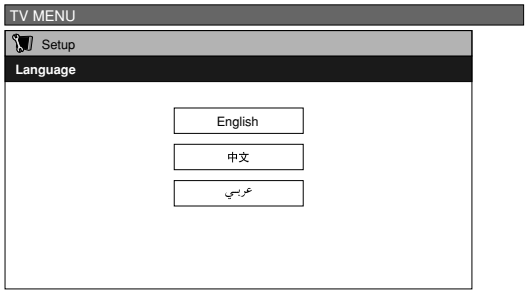
1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Setup”.
- If password is already set, you are asked to enter it. Follow the same steps as explained in “Auto installation”. (See steps 2 and 3 on page 22.)

3 Press ▲/▼ to select “Language”, and then press **ENTER**.



4 Press ▲/▼ to select the desired language listed on the screen, and then press **ENTER**.



PC Input mode

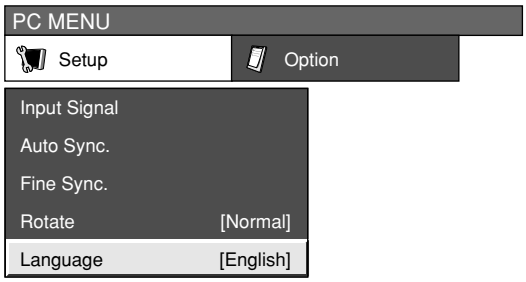
1 Press **MENU** and the PC MENU screen displays.

2 Press ◀/▶ to select “Setup”. Then you are asked to enter the password for child lock. (If you have not set the password yet, skip to step 3.)
- See page 60 for setting password.

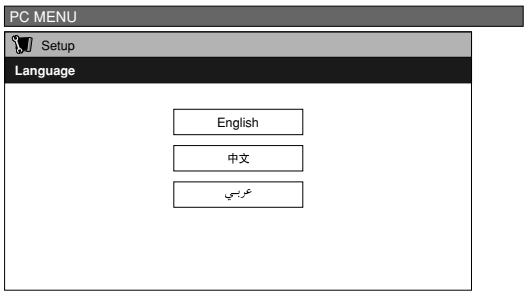
Press ▲/▼ to select “Password”, and then press **ENTER**.

Enter your 4-digit password with **0** – **9** on the remote control unit.

3 Press ▲/▼ to select “Language”, and then press **ENTER**.

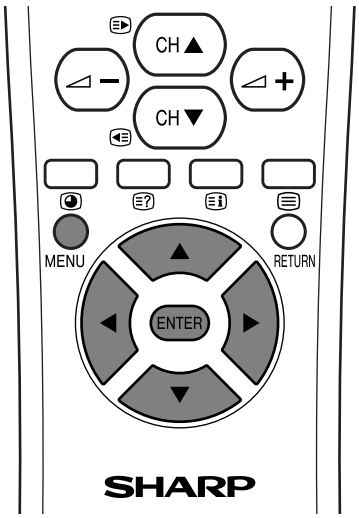


4 Press ▲/▼ to select the desired language listed on the screen, and then press **ENTER**.



Picture adjustments

Adjust the picture to your preference with the following picture settings.



1 Press **MENU** and the TV MENU (PC MENU) screen displays.

2 Press ◀/▶ to select “Picture”.
- Picture menu displays.

3 Press ▲/▼ to select a specific adjustment item.

4 Press ◀/▶ to adjust the item to your desired position.

NOTE

- When all adjustments set to factory preset values,
  ① Press ▲/▼ to select “Reset”, and then press **ENTER**.
  ② Press ◀/▶ to select “Yes”, and then press **ENTER**.

Adjustments items for AV source

Selected item	◀button	▶button
Contrast	For less contrast	For more contrast
Brightness	For less brightness	For more brightness
Colour	For less colour intensity	For more colour intensity
Tint	Skin tones become purplish	Skin tones become greenish
Sharpness	For less sharpness	For more sharpness

NOTE

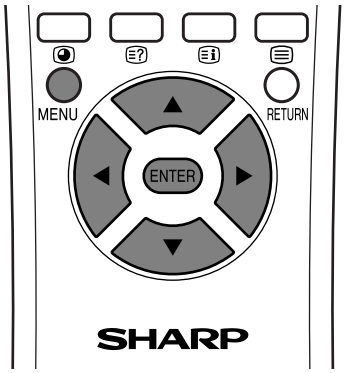
- Select “Advanced” and then press **ENTER** to set “C.M.S.”, “Colour Temp”, “Black”, “Monochrome”, “Film Mode”, “I/P Setting” or “DNR”. See pages 32 to 35.

Adjustments items for PC source

Selected item	◀button	▶button
Contrast	For less contrast	For more contrast
Brightness	For less brightness	For more brightness
Red	For weaker red	For stronger red
Green	For weaker green	For stronger green
Blue	For weaker blue	For stronger blue

C.M.S. (Colour Management System)

Colour tone is managed using the six-colour adjustment setting.



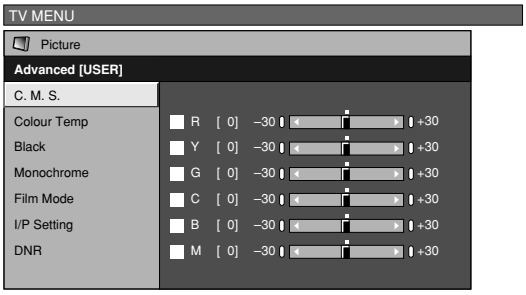
AV input mode

1 Press **MENU** and the TV MENU screen displays.

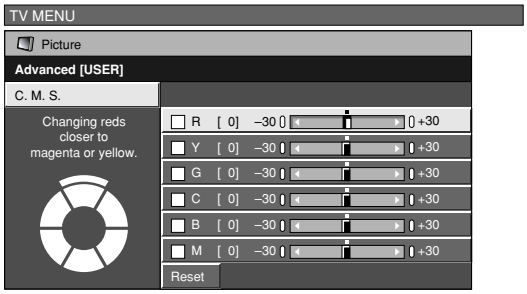
2 Press ◀/▶ to select “Picture”.
- Picture menu displays.

3 Press ▲/▼ to select “Advanced”, and then press **ENTER**.

4 Press ▲/▼ to select “C.M.S.”, and then press **ENTER**.



5 Press ▲/▼ to select a specific adjustment item.



6 Press ◀/▶ to adjust the item to your desired position.

NOTE

- For resetting all adjustment items to the factory preset values, press ▲/▼ to select “Reset”, and then press **ENTER**.

PC input mode

1 Press **MENU** and the PC MENU screen displays.

2 Press ◀/▶ to select “Picture”.
- Picture menu displays.

3 Press ▲/▼ to select “C.M.S.”, and then press **ENTER**.

4 Press ▲/▼ to select a specific adjustment item.

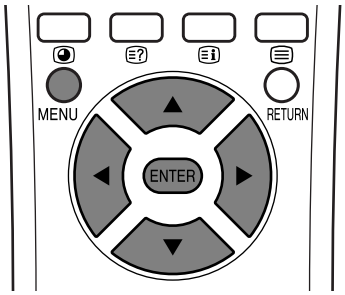
5 Press ◀/▶ to adjust the item to your desired position.

NOTE

- For resetting all adjustment items to the factory preset values, press ▲/▼ to select “Reset”, and then press **ENTER**.

Colour temperature

Adjusts the colour temperature to give the best white image.



1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Picture”.
• Picture menu displays.

3 Press ▲/▼ to select “Advanced”, and then press **ENTER**.

4 Press ▲/▼ to select “Colour Temp”, and then press **ENTER**.

5 Press ▲/▼ to select the desired level, and then press **ENTER**.

Selected item	Description
High **Mid-High** **Mid** **Mid-Low** **Low**	White with Bluish tone ⬍ White with Reddish tone

Black

Allows you to select a level for automatic adjustment of a black areas of the image to suit viewing conditions.

1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Picture”.
• Picture menu displays.

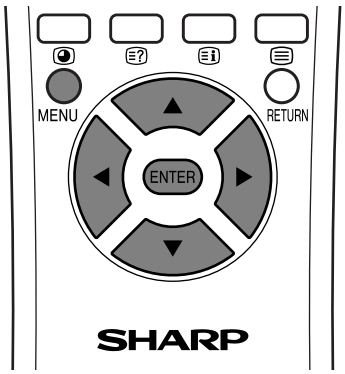
3 Press ▲/▼ to select “Advanced”, and then press **ENTER**.

4 Press ▲/▼ to select “Black”, and then press **ENTER**.

5 Press ▲/▼ to select the desired level, and then press **ENTER**.

Monochrome

For viewing a video in monochrome.

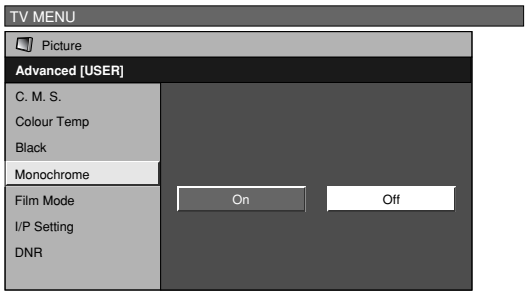


1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Picture”.
- Picture menu displays.

3 Press ▲/▼ to select “Advanced”, and then press **ENTER**.

4 Press ▲/▼ to select “Monochrome”, and then press **ENTER**.



5 Press ◀/▶ to select “On”, and then press **ENTER**.

Film mode

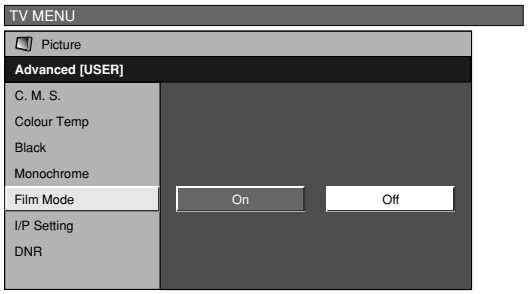
Automatically detects a film-based source (originally encoded at 24 frames/second), analyses it then recreates each still film frame for high-definition picture quality.

1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Picture”.
- Picture menu displays.

3 Press ▲/▼ to select “Advanced”, and then press **ENTER**.

4 Press ▲/▼ to select “Film Mode”, and then press **ENTER**.
- Some items may be greyed out. They are not selectable.



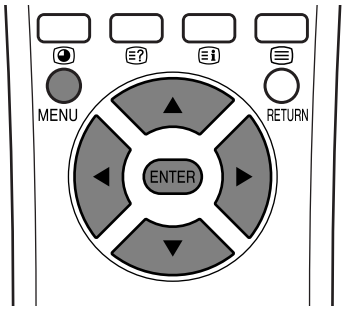
5 Press ◀/▶ to select “On”, and then press **ENTER**.

NOTE

- Set the Film Mode to “On” manually to detect a film-based source (originally encoded 24 frames/second) when input source has vertical frequency of 50 Hz (e.g. PAL, SECAM etc.) .

I/P setting

Adjusting the image and input signal can give you a more beautiful picture.

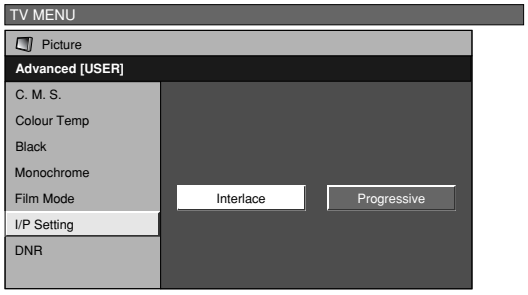


1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Picture”.
- Picture menu displays.

3 Press ▲/▼ to select “Advanced”, and then press **ENTER**.

4 Press ▲/▼ to select “I/P Setting”, and then press **ENTER**.
- Some items may be greyed out. They are not selectable.



5 Press ◀/▶ to select “Interlace” or “Progressive”, and then press **ENTER**.

NOTE

- The I/P Setting is set to Progressive when Film Mode is “On”.

DNR (Digital Noise Reduction)

Produces a clearer video image.

1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Picture”.
- Picture menu displays.

3 Press ▲/▼ to select “Advanced”, and then press **ENTER**.

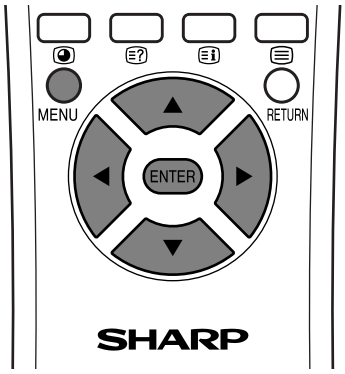
4 Press ▲/▼ to select “DNR”, and then press **ENTER**.
- Some items may be greyed out. They are not selectable.

5 Press ▲/▼ to select the desired level, and then press **ENTER**.

Audio adjustment

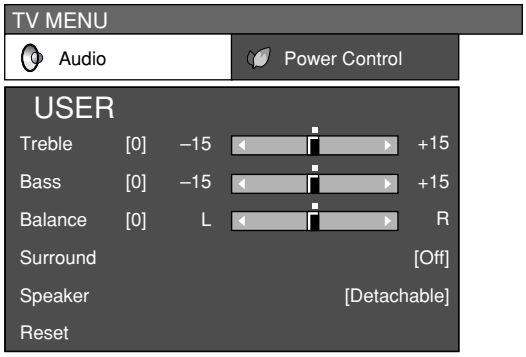
Sound adjustment

You can adjust the sound quality to your preference with the following settings.



1 Press **MENU** and the TV MENU (PC MENU) screen displays.

2 Press ◀/▶ to select “Audio”.
- Audio menu displays.



3 Press ▲/▼ to select a specific adjustment item.

4 Press ◀/▶ to adjust the item to your desired position.

Selected item	◀button	▶button
Treble	For weaker treble	For stronger treble
Bass	For weaker bass	For stronger bass
Balance	Decrease audio from the right speaker	Decrease audio from the left speaker

NOTE

- For resetting all adjustment items to factory preset values, press ▲/▼ to select “Reset”, press **ENTER**, press ◀/▶ to select “Yes”, and then press **ENTER**.

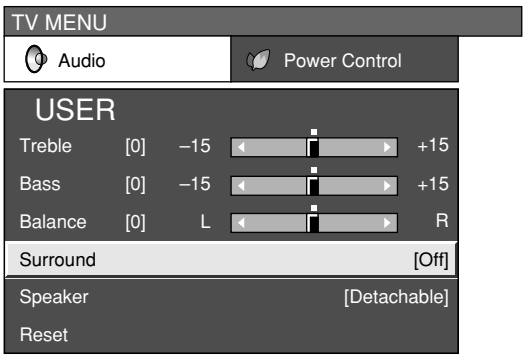
Surround

You can also produce SRS and FOCUS effects from the “Audio” setting.

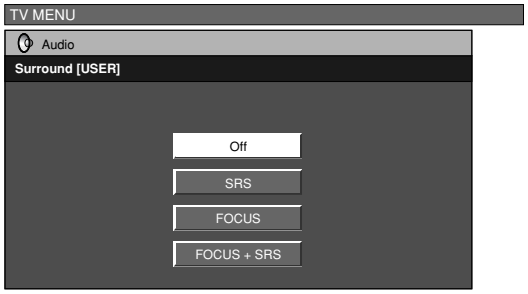
1 Press **MENU** and the TV MENU (PC MENU) screen displays.

2 Press ◀/▶ to select “Audio”.
- Audio menu displays.

3 Press ▲/▼ to select “Surround”, and then press **ENTER**.



4 Press ▲/▼ to select the desired level, and then press **ENTER**.

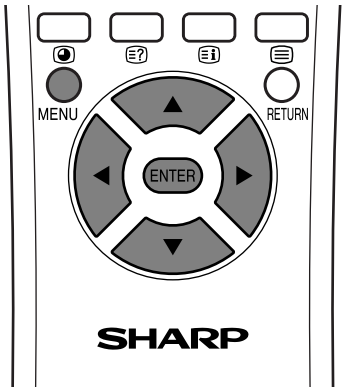


NOTE

- You can choose SRS and FOCUS by pressing (●) on the remote control unit. See page 19 for SRS and FOCUS.

Power Control

Power Control setting allows you to reduce the display brightness to save energy.



Power control for AV source

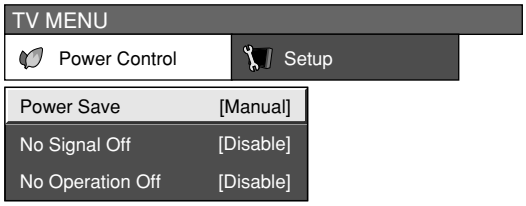
Power save

When set to “Manual” or “Auto”, power consumption is reduced by decreasing backlight brightness.

1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Power Control”.
- Power control menu displays.

3 Press ▲/▼ to select “Power Save”, and then press **ENTER**.



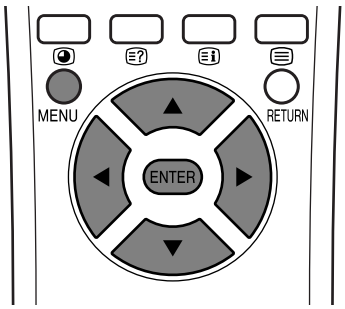
4 Press ◀/▶ to select the desired backlight brightness, and then press **ENTER**.

NOTE

- When setting to “Auto”, the OPC indicator lights up green, senses the surrounding light and automatically adjusts the backlight brightness. Make sure no object obstructs the OPC sensor, which could affect its ability to sense surrounding light.
- Power Save can be set differently for AV input mode and PC input mode.

No signal Off

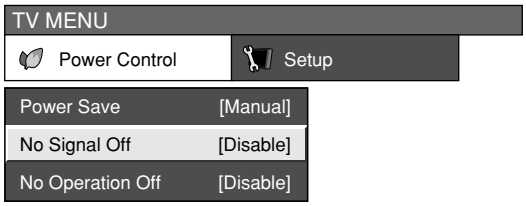
When set to “Enable”, the power will automatically shut down if no signal inputs for 15 minutes.



1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Power Control”.
- Power control menu displays.

3 Press ▲/▼ to select “No Signal Off”, and then press **ENTER**.



4 Press ◀/▶ to select “Enable”, and then press **ENTER**.

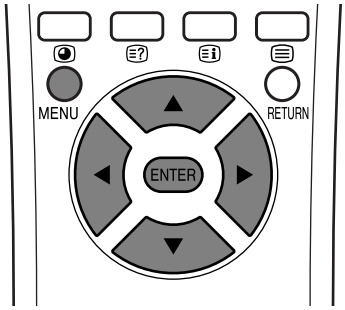
- Five minutes before the power shuts down, remaining time displays every minute.

NOTE

- “Disable” is factory preset value.
- When a TV programme finishes, and the AVC System receives signal input, this function may not operate.

No operation Off

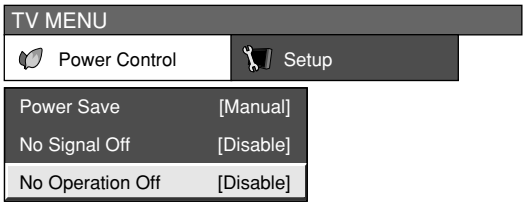
When set to “Enable”, the power will automatically shut down if there is no operation for 3 hours.



1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Power Control”.
- Power control menu displays.

3 Press ▲/▼ to select “No Operation Off”, and then press **ENTER**.



4 Press ◀/▶ to select “Enable”, and then press **ENTER**.

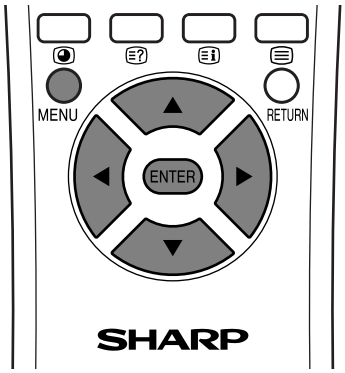
- Five minutes before the power shuts down, remaining time displays every minute.

NOTE

- “Disable” is factory preset value.

Power Control for PC source

Power Control allows you to reduce display brightness and save energy.

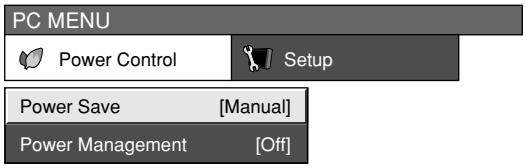


Power save

1 Press **MENU** and the PC MENU screen displays.

2 Press ◀/▶ to select “Power Control”.
- Power control menu displays.

3 Press ▲/▼ to select “Power Save”, and then press **ENTER**.



4 Press ◀/▶ to select the desired backlight brightness, and then press **ENTER**.

NOTE

- When setting to “Auto”, the OPC indicator lights up green, senses the surrounding light and automatically adjusts the backlight brightness. Make sure no object obstructs the OPC sensor, which could affect its ability to sense surrounding light.
- Power Save can be set differently for AV input mode and PC input mode.

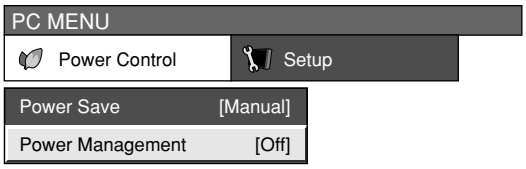
Power management

When set, the power will automatically shut down.

1 Press **MENU** and the PC MENU screen displays.

2 Press ◀/▶ to select “Power control”.
- Power control menu displays.

3 Press ▲/▼ to select “Power Management”, and then press **ENTER**.

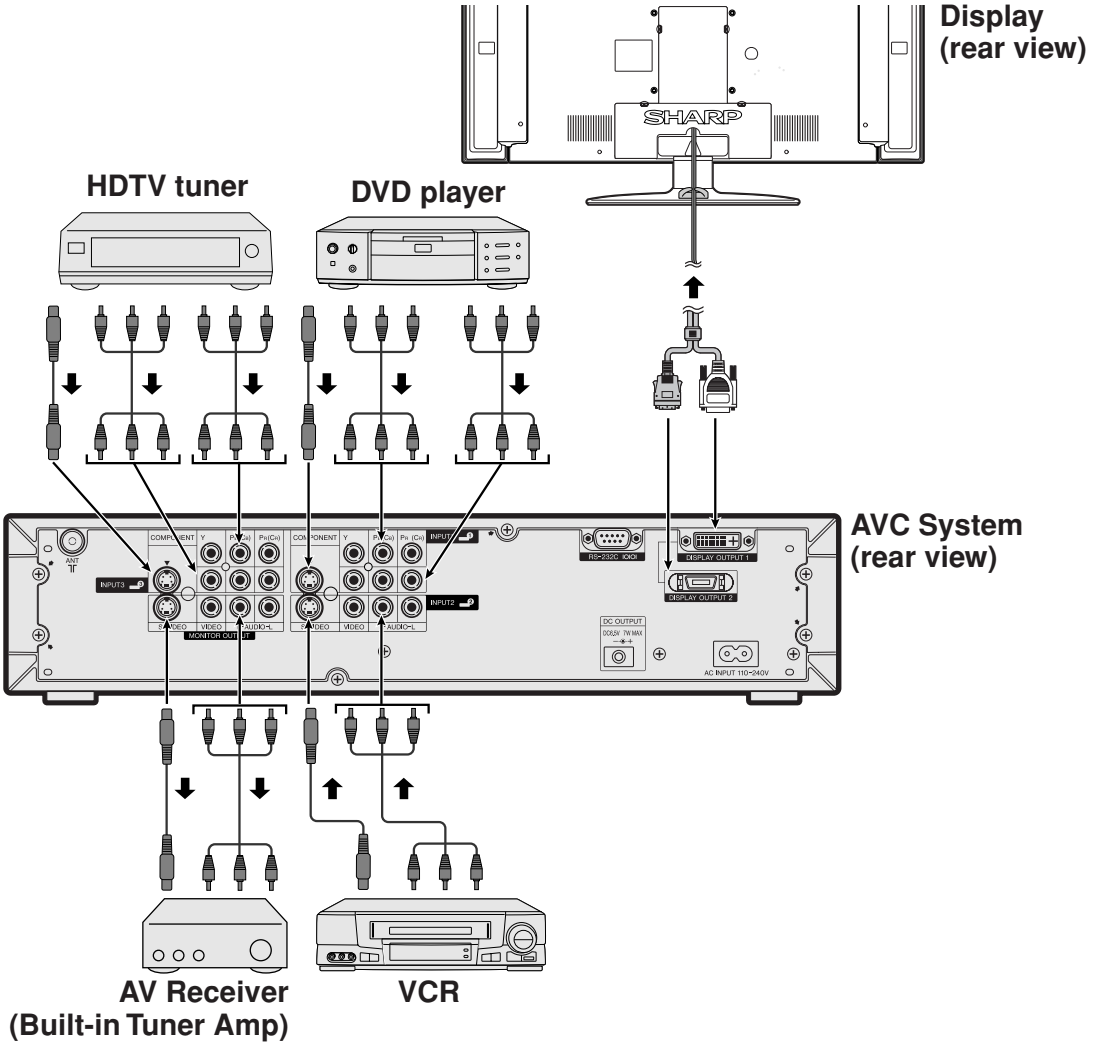


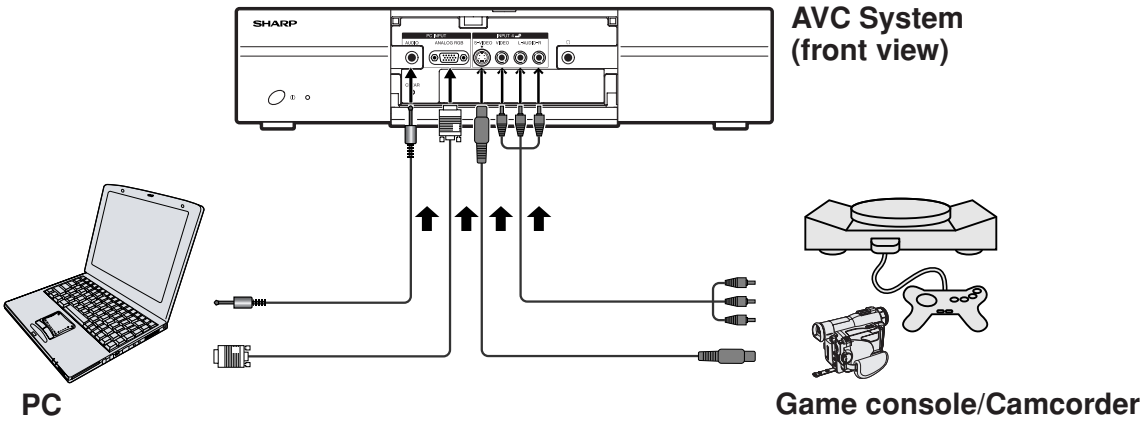
4 Press ▲/▼ to select “Mode1” or “Mode2”, and then press **ENTER**.

Selected item	Description
Off	• No power management • Factory preset value.
Mode1	• If no signal inputs for 8 minutes, the power shuts down. • Even if you start using the PC and the signal inputs again, the System stays off. • The System turns on again by pressing ⏻ | (STANDBY/ON) button on the Display or ⏻ | on the remote control unit. (See page 16.)
Mode2	• If no signal inputs for 8 seconds, the power shuts down. • When you start using the PC and the signal inputs again, the System turns on.

Using external equipment

You can connect many types of external equipment to your System, like a VCR, DVD player, HDTV tuner, PC, game console and camcorder. To view external source images, select the input source from ⏎ on the remote control unit or **INPUT** on the Display.





CAUTION

- To protect all equipment, always turn off the AVC System before connecting to a VCR, DVD player, HDTV tuner, PC, game console, camcorder or other external equipment.

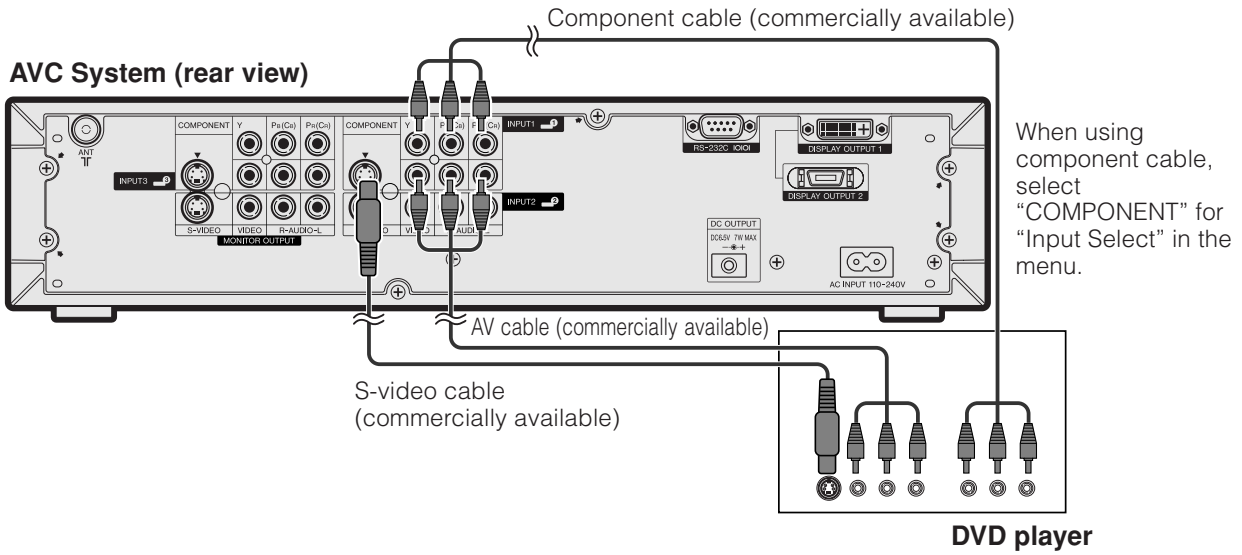
NOTE

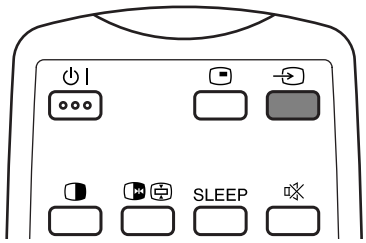
- Please refer to the relevant operation manual (DVD player, PC, etc.) carefully before making connections.

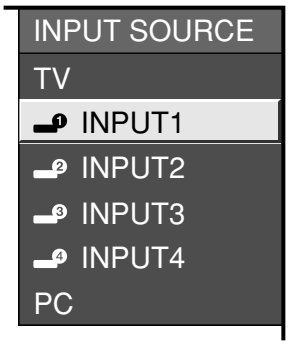
Watching a DVD image

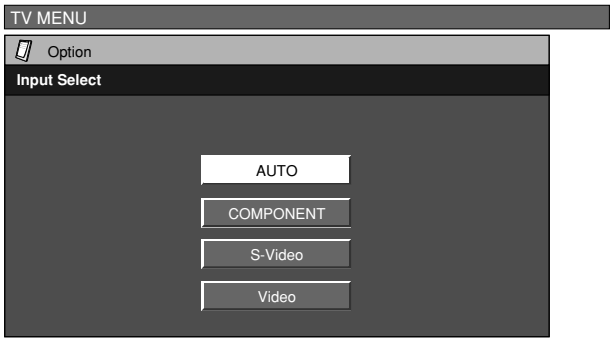
Connecting a DVD player

You can use the INPUT 1 terminal when connecting to a DVD player and other audiovisual equipment.


Component cable (commercially available)
AVC System (rear view)
When using component cable, select "COMPONENT" for "Input Select" in the menu.
AV cable (commercially available)
S-video cable
(commercially available)
DVD player







(For INPUT1 signal)

Displaying a DVD image

To watch a DVD image, select "INPUT1" from "INPUT SOURCE" menu using ⏎ on the remote control unit or **INPUT** on the Display.

Then select "INPUT1" on "Input Select" in the menu to set the correct input signal type. (See page 51.)

The setting is stored and can be selected in the "INPUT SOURCE" menu.

NOTE

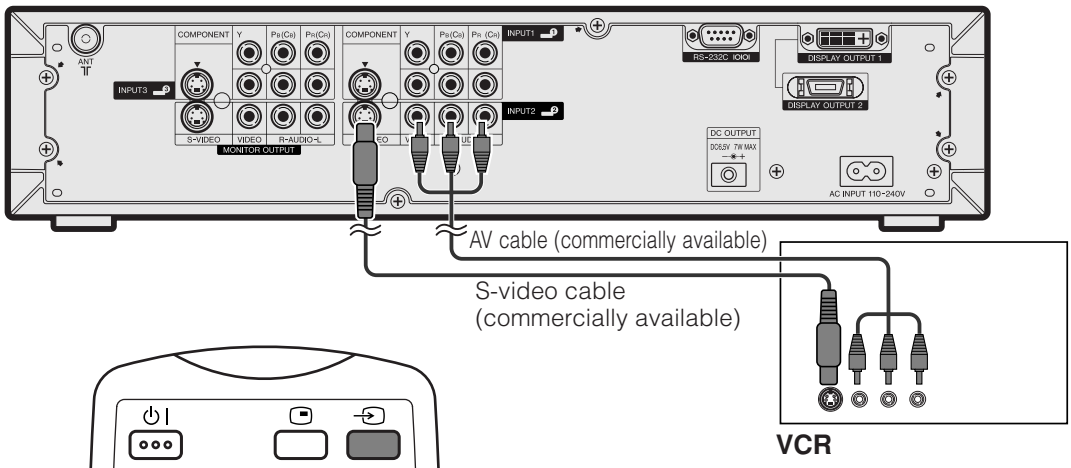
- Each time ⏎ is pressed, the input source toggles.
- If the DVD image does not come in clearly, you may need to change the input signal type setting on the "Input Select" menu.
- Refer to your DVD player operation manual for the signal type.

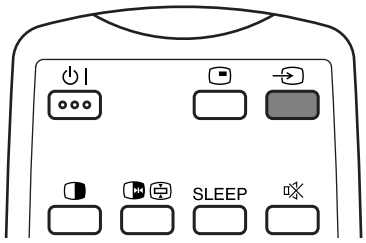
Watching a VCR image

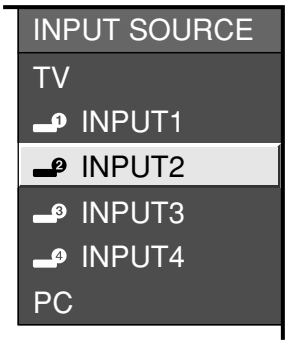
Connecting a VCR

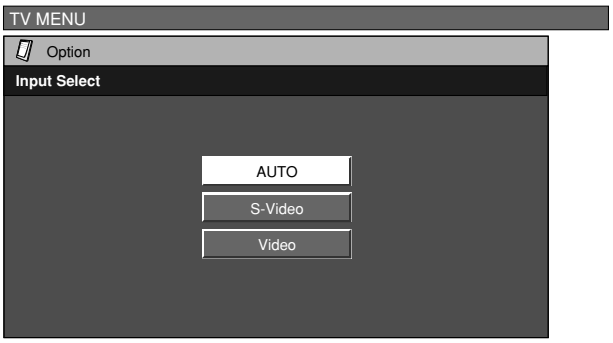
You can use the INPUT 2 terminal when connecting a VCR and other audiovisual equipment.

AVC System (rear view)









(For INPUT2 signal)

Displaying a VCR image

To watch a VCR image, select “INPUT2” from the “INPUT SOURCE” menu using ⏎ on the remote control unit or **INPUT** on the Display.

Then select “INPUT2” on “Input Select” in the menu to set the correct input signal type. (See page 51.)

The setting is stored and can be selected in the “INPUT SOURCE” menu.

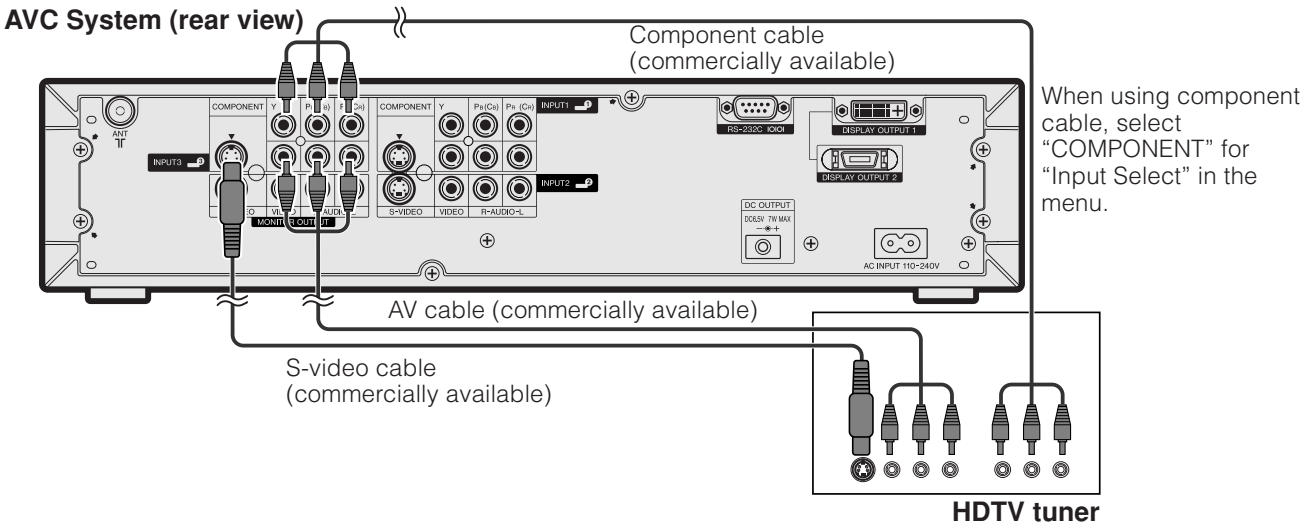
NOTE

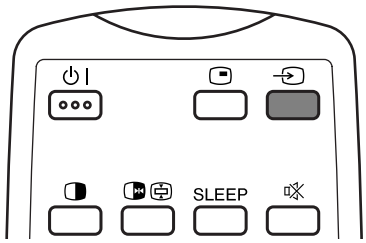
- Each time ⏎ is pressed, the input source toggles.
- If the VCR image does not come in clearly, you may need to change the input signal type setting on the “Input Select” menu.
- Refer to your VCR operation manual for the signal type.

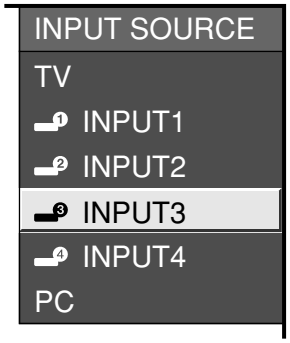
Watching broadcasts via an HDTV tuner

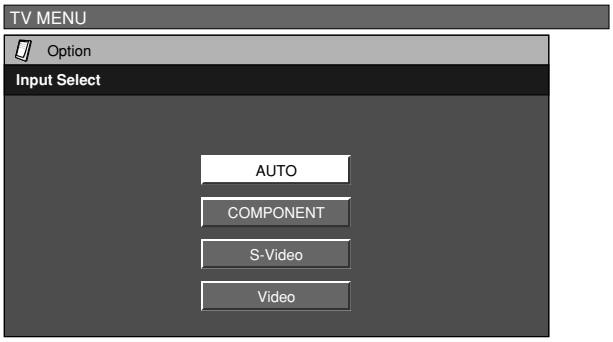
Connecting an HDTV tuner

You can use the INPUT 3 terminal when connecting an HDTV tuner and other audiovisual equipment.









(For INPUT3 signal)

Displaying broadcasts via an HDTV tuner

To watch an HDTV tuner image, select "INPUT3" from "INPUT SOURCE" menu using ⏎ on the remote control unit or **INPUT** on the Display.

Then select "INPUT3" on "Input Select" in the menu to set the correct input signal type. (See page 51.)

The setting is stored and can be selected in the "INPUT SOURCE" menu.

NOTE

- Each time ⏎ is pressed, the input source toggles.
- If the HDTV tuner image does not come in clearly, you may need to change the input signal type setting on the "Input Select" menu.

Enjoying a game console and viewing camcorder images

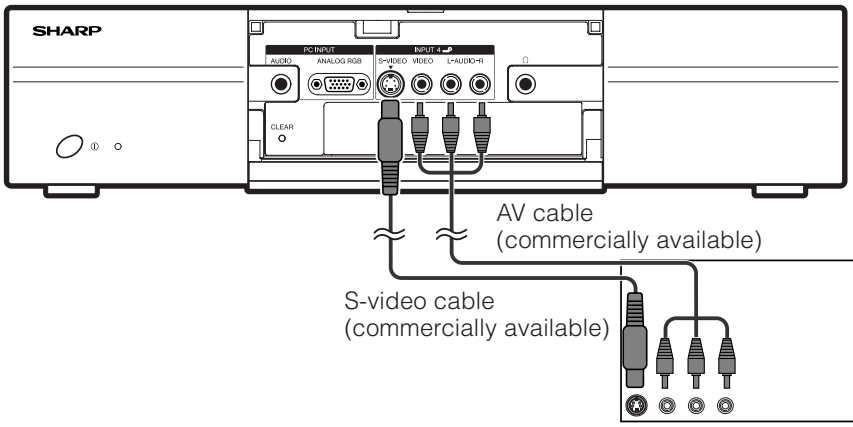
Connecting a game console or camcorder

A game console, camcorder and some other audiovisual equipment are conveniently connected using the INPUT 4 terminals.

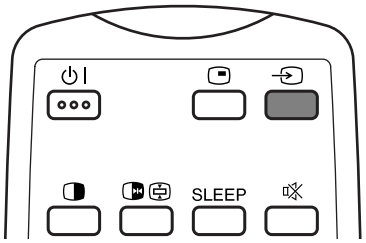
NOTE

- The S-video terminal has priority over the video terminals.

AVC System (front view)



Game console/Camcorder

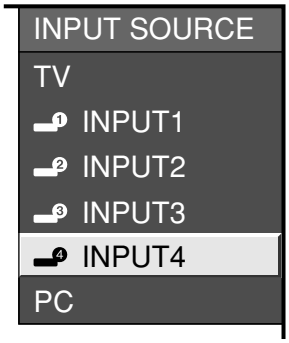


Displaying an image of the game console or camcorder

To connect a game console or view a camcorder, select "INPUT4" from the "INPUT SOURCE" menu using ⇨ on the remote control unit or **INPUT** on the Display.

Then select "INPUT4" on "Input Select" in the menu to set the correct input signal type. (See page 51.)

The setting is stored and can be selected on the "INPUT SOURCE" menu.



NOTE

- Each time ⇨ is pressed, the input source toggles.

(For INPUT4 signal)

Viewing an image from a PC

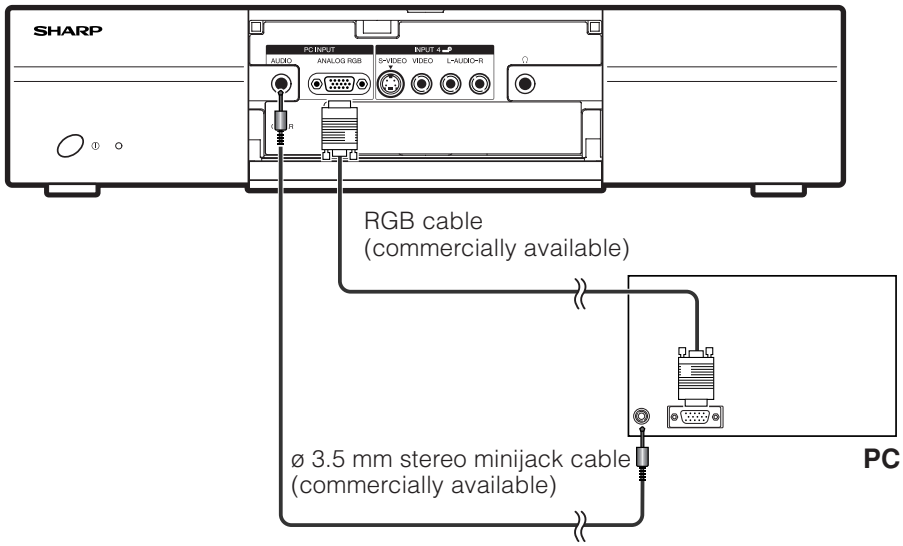
Connecting a PC

Use the PC terminals to connect a PC.

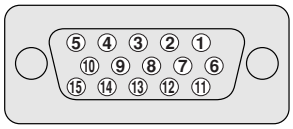
NOTE

- The PC input terminals are DDC1/2B-compatible.
- Refer to page 67 for a list of PC signals compatible with the System.

AVC System (front view)



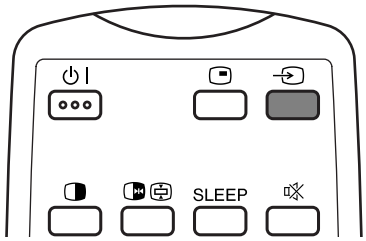
Signal names for 15-pin mini D-sub connecter



Pin No.	Signal name	Pin No.	Signal name	Pin No.	Signal name
①	R	⑥	GND (Ground)	⑪	Not connected
②	G	⑦	GND (Ground)	⑫	SDA
③	B	⑧	GND (Ground)	⑬	HD
④	Not connected	⑨	+5V	⑭	VD
⑤	CSYNC	⑩	GND (Ground)	⑮	SCL

NOTE

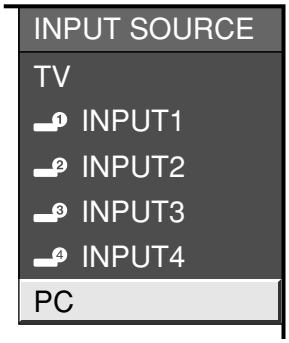
- Macintosh adaptor may be required for use for some Macintosh computers.



Displaying an image from a PC

To view an image from a PC, select “PC” from the “INPUT SOURCE” menu using ⏎ on the remote control unit or **INPUT** on the Display.

When connecting to a PC, the correct input signal type is automatically detected. (See page 55.) If the PC image does not come in clearly, you may need to set the Auto Sync. adjustment in the “Setup” menu. (See page 50.)

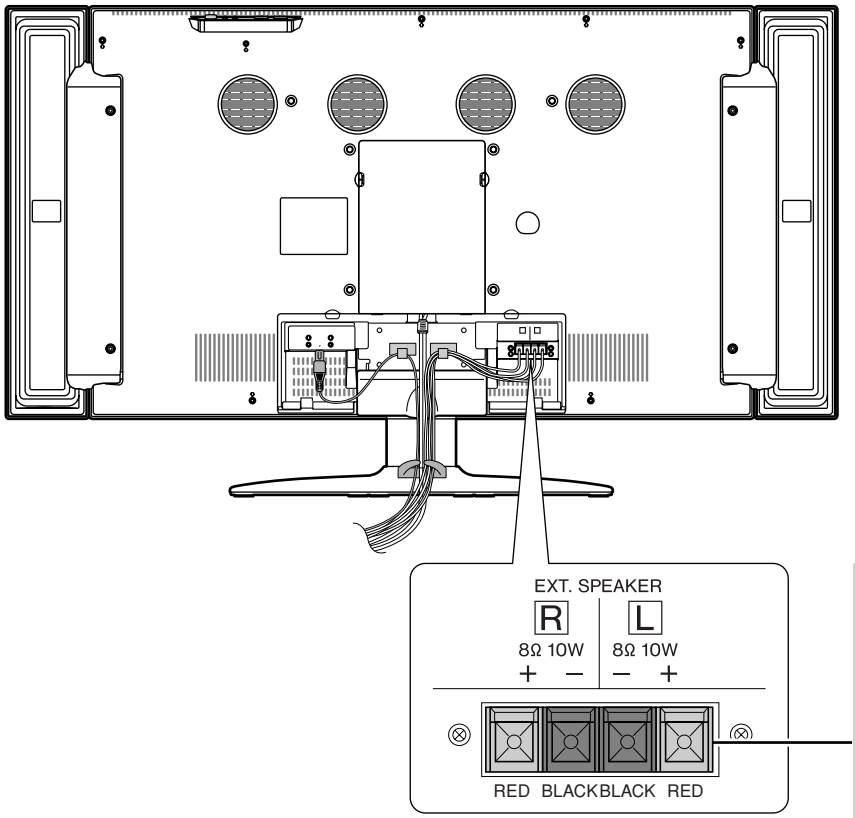


NOTE

- Each time ⏎ is pressed, the input source toggles.

Connecting external speakers

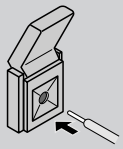
Rear view



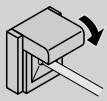
How to connect the speaker cable

① Pull up the lid.

② Insert the edge of the cable.



③ Put the lid back down.



- Bundle the cables of the external speakers with clamps as shown above.

When using external speakers
- Change the speaker setting to external speakers. (See page 47.)

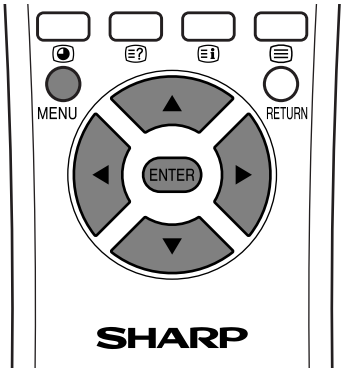
Make sure to connect the speaker jack and cable polarity (+, −) properly
- The speaker jacks have plus (+) and minus (−) polarity.
- Plus is red and minus is black.
- The cables are also divided into plus and minus.
- When connecting the left/right speakers, be sure to connect the plus/minus jacks with the correct cables.

NOTE
- See page 9 for bundling the cables of the external speakers.
- Unplug the AC cord from the AC outlet before installing the speakers.

CAUTION
- Make sure external speakers have 8 ohm and 10 watt specifications.
- Connect the plus/minus jacks with the correct cables. Incorrect connection may cause a short.

Selecting speakers

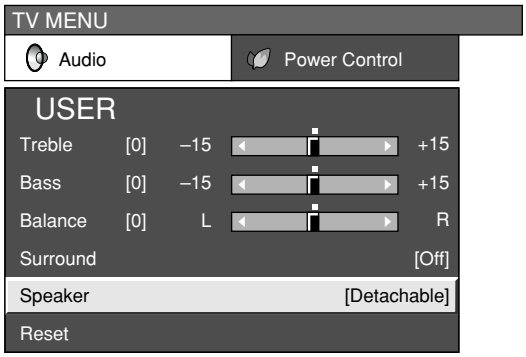
You can output audio using the supplied speakers (detachable) or other external speakers.



1 Press **MENU** and the TV MENU (PC MENU) screen displays.

2 Press ◀/▶ to select “Audio”.
- Audio menu displays.

3 Press ▲/▼ to select “Speaker”, and then press **ENTER**.

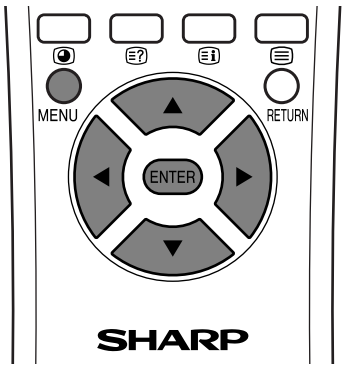


4 Press ◀/▶ to select “External” or “Detachable”, and then press **ENTER**.

Useful adjustment settings

Image position (AV input mode only)

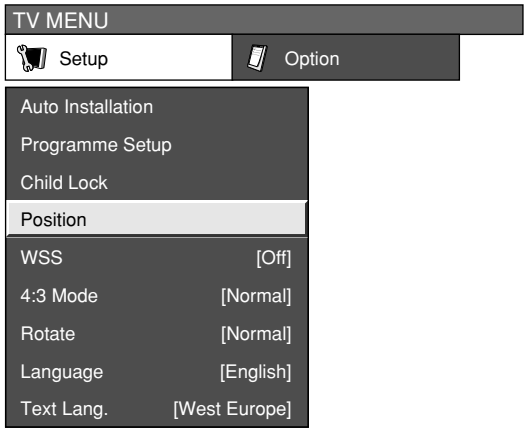
For adjusting a picture's horizontal and vertical position.



1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select "Setup".
- If password is already set, you are asked to enter it. Follow the same steps as explained in "Auto installation". (See steps 2 and 3 on page 22.)

3 Press ▲/▼ to select "Position", and then press **ENTER**.



4 Press ▲/▼ to select "H-Pos." or "V-Pos.".

5 Press ◀/▶ to adjust the item to your desired position.

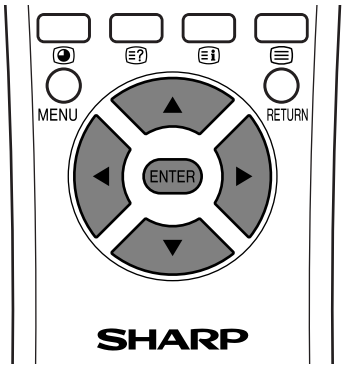
NOTE

- For resetting all adjustment items to the factory preset values, press ▲/▼ to select "Reset", and then press **ENTER**.
- **Adjustments are stored separately according to input source.**
- You can easily move the image position as shown on page 49, but when the power is switched off the image will return to the previously memorised position.

Selected item	Description
H-Pos.	Centres the image by moving it to the left or right.
V-Pos.	Centres the image by moving it up or down.

Moving the picture on the screen

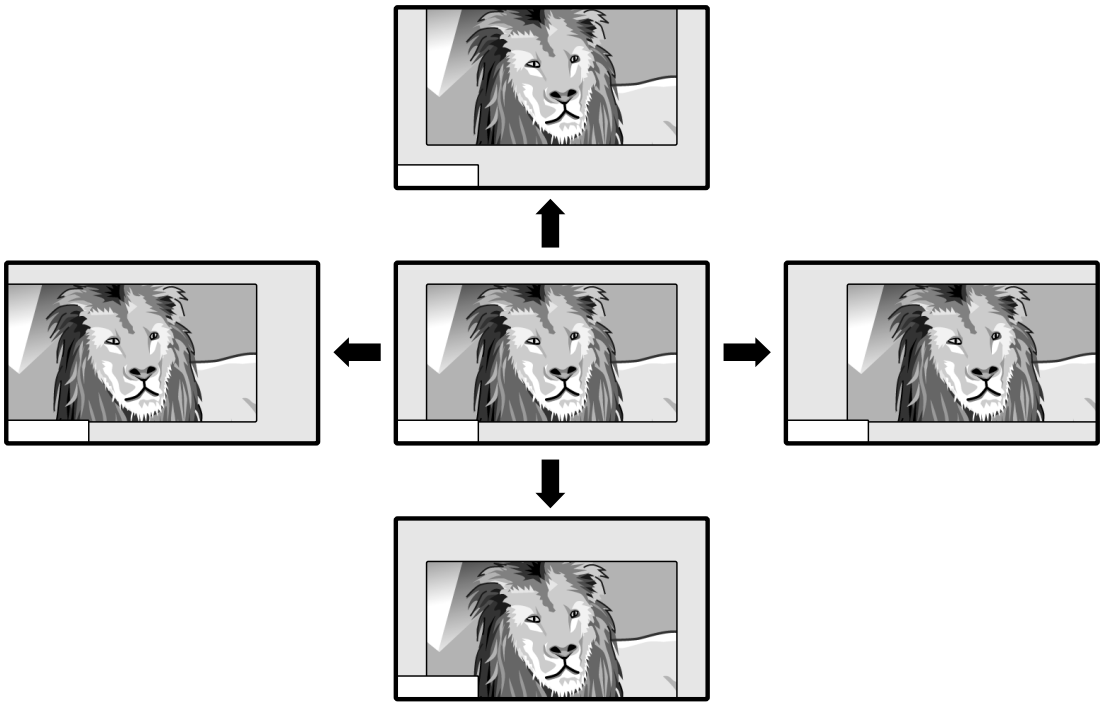
You can move the picture around on the screen.



Press ▲/▼/◀/▶ to move an image on the screen to the desired position. Press **ENTER** to return to the initial image position.

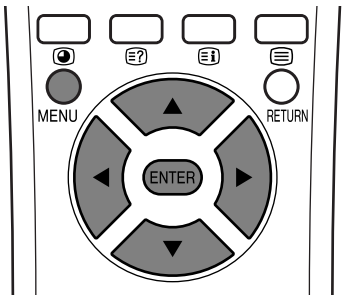
NOTE

- While pressing ▲/▼/◀/▶, an on-screen image, "Adjusting Position" displays to the desired position.
- This setting cannot be stored. Once the System shuts down or enters standby mode, the setting is erased. To move the picture around the screen again, you must perform the above procedure again.
- The image position setting using the steps on page 48 can be stored. Select either according to your objectives.
- "TV", "INPUT1", "INPUT2", "INPUT3" and "INPUT4" can each adjust the image position setting on this page. The same for WIDE modes.
- An on-screen image from a PC source cannot be moved around.
- Even when the image fills the screen, its position can be adjusted with this function.



Auto Sync. adjustment (PC input mode only)

For automatically adjusting the PC image.

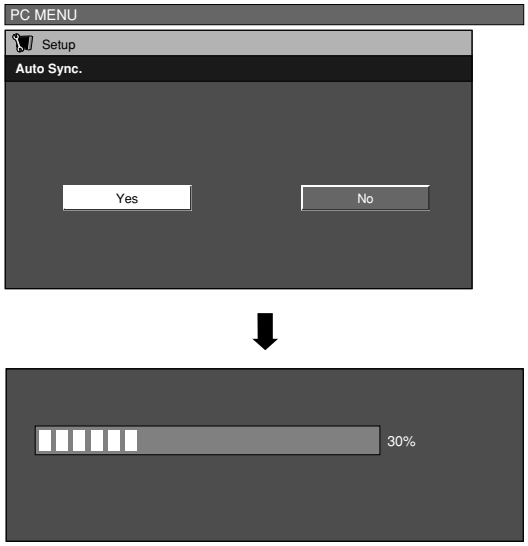


1 Press **MENU** and the PC MENU screen displays.

2 Press ◀/▶ to select “Setup”.
- Setup menu displays.

3 Press ▲/▼ to select “Auto Sync.”, and then press **ENTER**.

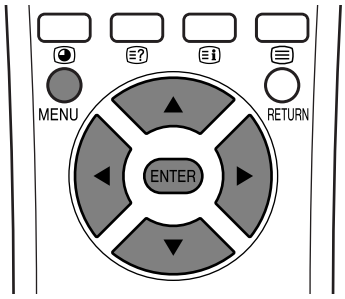
4 Press ◀/▶ to select “Yes”, and then press **ENTER**.
- Auto Sync. starts and “Adjusting the image” displays.



NOTE
- When Auto Sync. is successful, “Auto Sync. completed successfully” displays. If not, Auto Sync. failed.
- Auto Sync. may fail even if “Auto Sync. completed successfully” displays.
- Auto Sync. is likely to succeed when an input PC image has wide vertical stripes (ex. pattern with high contrast stripes, or cross-hatched).
  It may fail when an input PC image is solid (low contrast).
- Be sure to connect the PC to the AVC System and switch it on before starting Auto Sync.

Fine Sync. adjustment (PC input mode only)

Ordinarily you can easily adjust the picture as necessary to change image position using Auto Sync. In some cases, however, manual adjustment is needed to optimise the image.

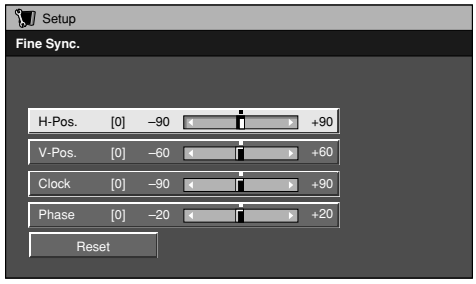


1 Press **MENU** and the PC MENU screen displays.

2 Press ◀/▶ to select “Setup”.
- If password is already set, you are asked to enter it. Follow the same step as explained in “Language setting for on-screen display (PC input mode)”. (See step 2 on page 30.)

3 Press ▲/▼ to select “Fine Sync.”, and then press **ENTER**.

4 Press ▲/▼ to select the specific adjustment item.



5 Press ◀/▶ to adjust the item to your desired position.

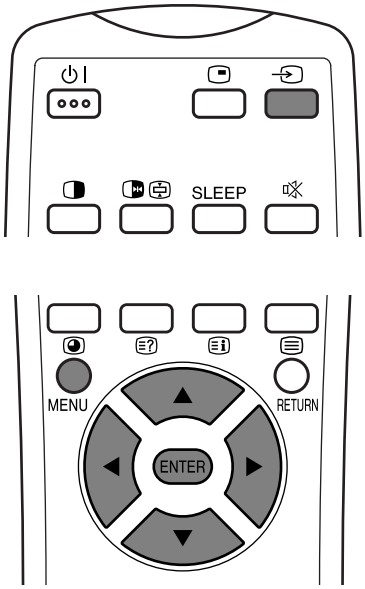
NOTE
- For resetting all adjustment items to the factory preset values, press ▲/▼ to select “Reset”, and then press **ENTER**.

Selected item	Description
H-Pos.	Centres the image by moving it to the left or right.
V-Pos.	Centres the image by moving it to up or down.
Clock	Adjusts the clock frequency.
Phase	Adjusts the clock phase.

Input signal source

Input selection

Can use for selecting the input source.



1 Press ⏎ on the remote control unit or **INPUT** on the Display.
- INPUT SOURCE menu displays.

2 Press ⏎ on the remote control unit or **INPUT** on the Display to select the input source.
- An image from the selected source automatically displays.
- You can also select the input source by pressing ▲/▼.

NOTE

- Some items may be greyed out. They are not selectable.

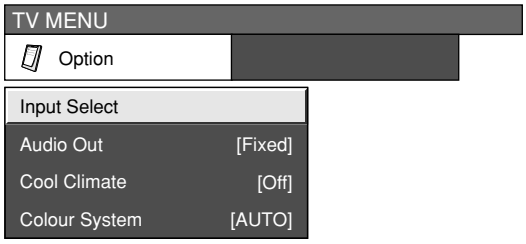
Input signal setting

For setting the signal type of external equipment.

1 Press **MENU** and the TV MENU screen displays.

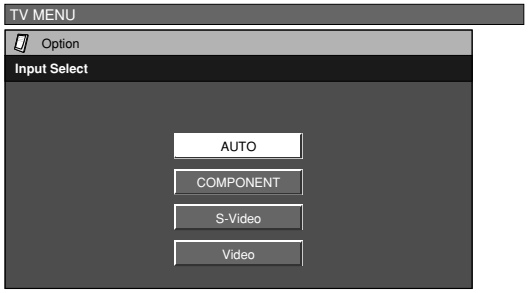
2 Press ◀/▶ to select “Option”.
- Option menu displays.

3 Press ▲/▼ to select “Input Select”, and then press **ENTER**.



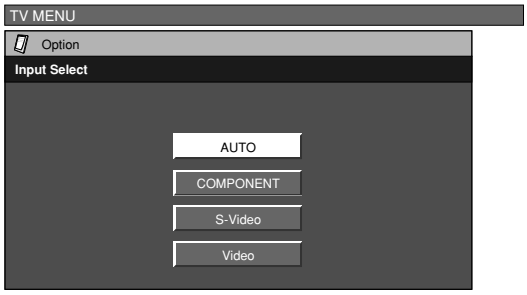
4 Press ▲/▼ to select a signal type you want to set, and then press **ENTER**.
- If the selected signal type is incorrect, an image does not display or no colour image displays.

For INPUT 1 signal



For INPUT 2 signal

For INPUT 3 signal



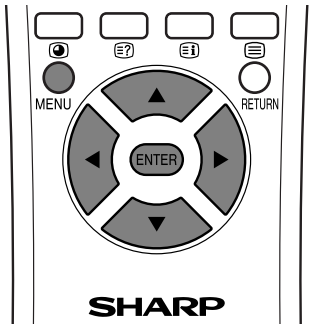
For INPUT 4 signal

NOTE

- **If no (colour) image displays, try to change the other signal type.**
- Check the operation manual of the external equipment for the signal type.

Colour system setting (AV input mode only)

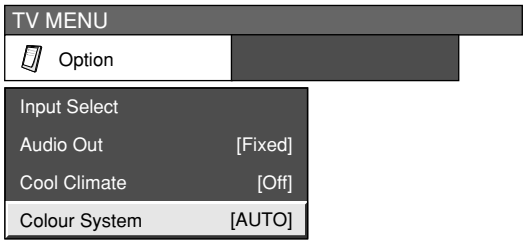
You can change the colour system to one that is compatible with the image on the screen.



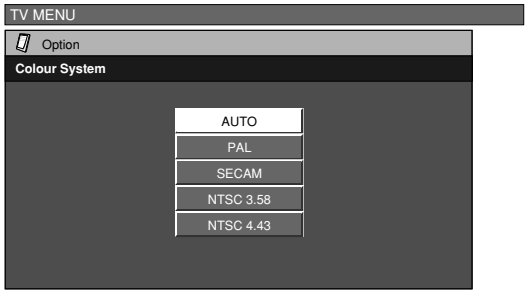
1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Option”.
- Option menu displays.

3 Press ▲/▼ to select “Colour System”, and then press **ENTER**.



4 Press ▲/▼ to select a compatible video signal system of your equipment, and then press **ENTER**.
- Some items may be greyed out. They are not selectable.

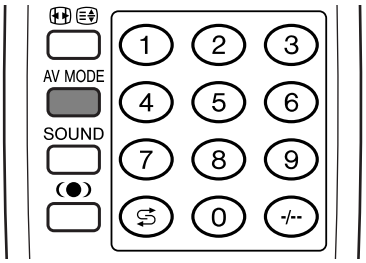


NOTE

- Factory preset value is “AUTO”.
- If “AUTO” is selected, colour system for each channel is automatically set. If an image does not display clearly, select another colour system (e.g. PAL, NTSC 4.43).

AV mode selection

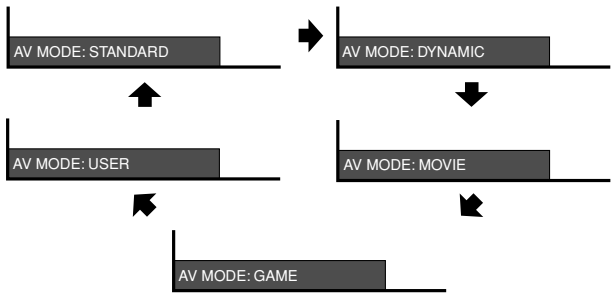
AV mode gives you five viewing options to choose from to best match the system environment, which can vary due to factors like room-brightness, type of programme watched or the type of image input from external equipment.



1 Press **AV MODE**.
- Present AV mode displays.

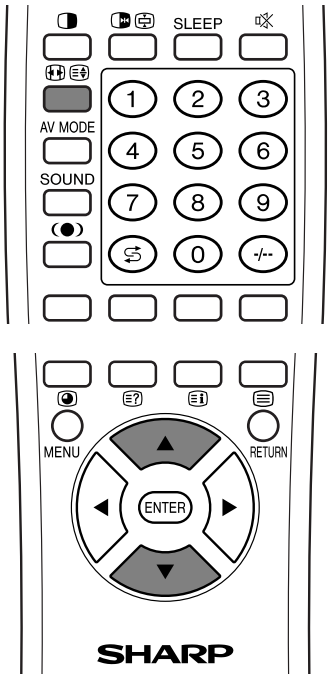
2 Press **AV MODE** again before the mode displayed on the screen disappears.
- The mode changes as shown below.

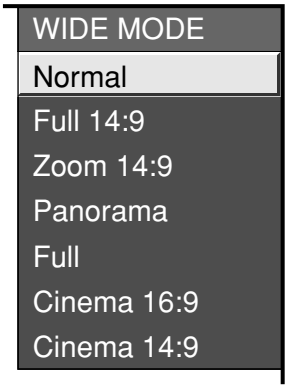
AV input mode



PC input mode

Selected item	Description
STANDARD	For a highly defined image in a normally bright room
DYNAMIC	For a clear-cut image emphasising high contrast for sports viewing
MOVIE	For a movie
GAME	Lowers image brightness for easier viewing.
USER	Allows the user to customise settings as desired. You can set the mode for each input source.





WIDE mode (for AV input mode)

Manual Selection

1 Press ⇔.

- The WIDE MODE menu displays.
- The menu lists the wide mode options selectable for the type of video signal currently received.

2 Press ⇔ or ▲/▼ while the WIDE MODE menu displays on the screen.

- As you toggle down the options, each is immediately reflected on the Display. No need to press **ENTER**.

Auto Selection

If you set “WSS” and “4:3 Mode” in the Setup menu on page 56, the optimum WIDE mode is automatically chosen for every broadcast containing the WSS information.

“WSS” menu

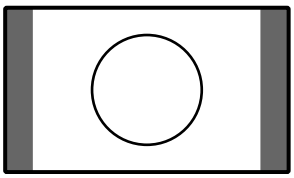
To enable Auto Selection, set “WSS” in the Setup menu to “On”. (See page 56.)

“4:3 Mode” menu

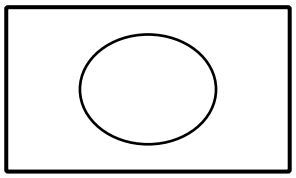
To set the type of the wide screen, select “Normal” or “Panorama” in the 4:3 Mode menu. (See page 56.)

NOTE

- If the broadcast signal contains no WSS information, Auto Selection will not function even when the WSS option is enabled.

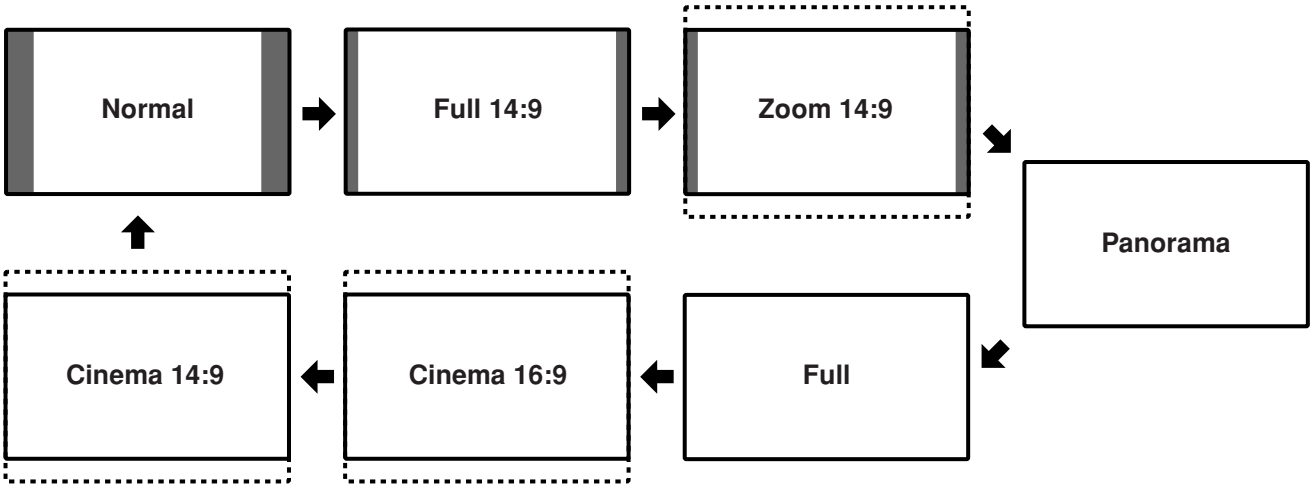


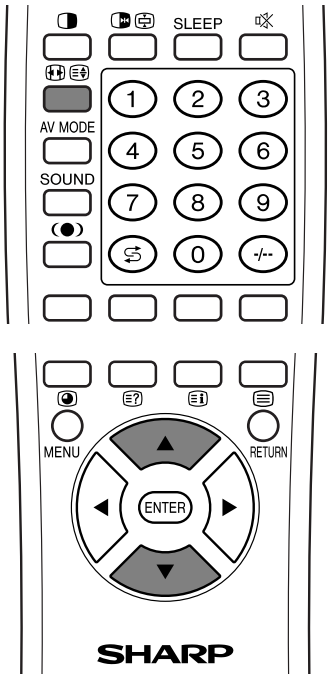
4:3 Mode set to “Normal”



4:3 Mode set to “Panorama”

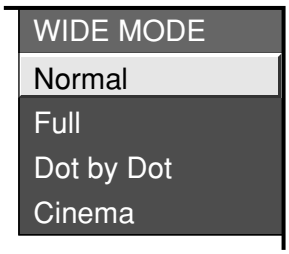
Selected item	Description
Normal	For 4:3 “standard” pictures. A side bar appears on each side.
Full 14:9	For 14:9 squeeze pictures. A thin side bar appears on each side.
Zoom 14:9	For 14:9 letterbox pictures. A thin side bar appears on each side, and you may also see bars on the top and bottom with some programmes.
Panorama	In this mode the picture is progressively stretched toward each side of the screen.
Full	For 16:9 squeeze pictures.
Cinema 16:9	For 16:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.
Cinema 14:9	For 14:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.



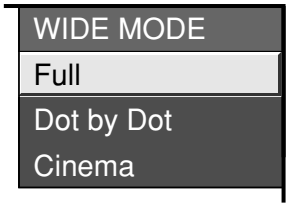


EXAMPLE

Input signal (640×480)



Input signal (1024×768)



WIDE mode (for PC input mode)

You can select the screen size.

NOTE

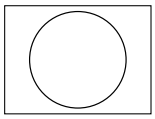
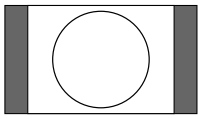
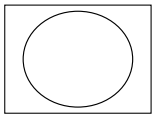
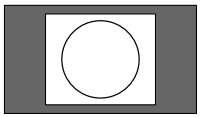
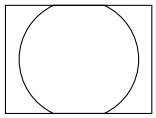
- Connect the PC before making adjustments. (See page 45.)
- Selectable screen size may vary with input signal type.

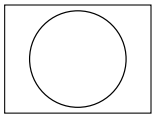
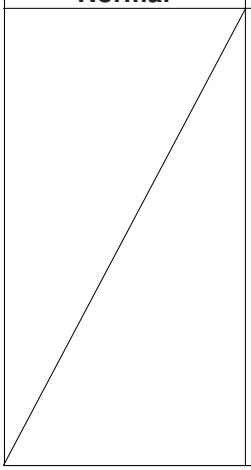
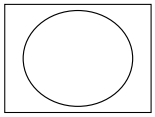
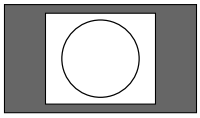
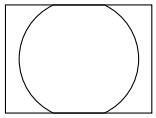
1 Press ⇔.
- The WIDE MODE menu displays.

2 Press ⇔ or ▲/▼ to select a desired item on the menu.

EXAMPLE

Screen size images.

Input Signal	Normal	Full	Dot by Dot	Cinema
 640×480	 Keeps the original aspect ratio in a full screen display.	 An image fully fills the screen.	 Detects the resolution of the signal and displays an image with the same number of pixels on the screen.	 Keeps the original aspect ratio in a full screen display. The top and bottom of the image is slightly cropped.

Input Signal	Normal	Full	Dot by Dot	Cinema
 1024×768		 An image fully fills the screen.	 Detects the resolution of the signal and displays an image with the same number of pixels on the screen.	 Keeps the original aspect ratio in a full screen display. The top and bottom of the image is slightly cropped.

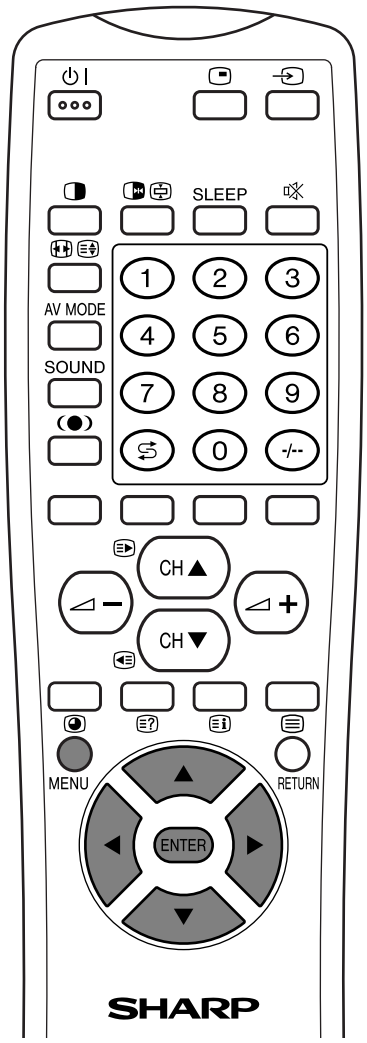
Input signal (PC input mode only)

- Some input signals may have to be registered manually to display properly.
- The pairs of input signals (resolutions) in the list below are not distinguishable when received. In such case, you have to set the correct signal manually. After setting once, it will display when the same signal (resolution) is input again.

640×400	720×400
640×480	848×480
1024×768	1280×768

NOTE

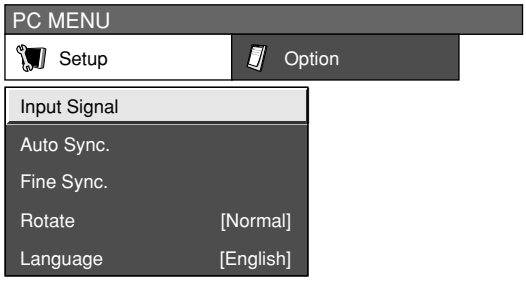
- You can only select the “Input Signal” on the Setup menu when receiving one of the 6 input signals listed above.



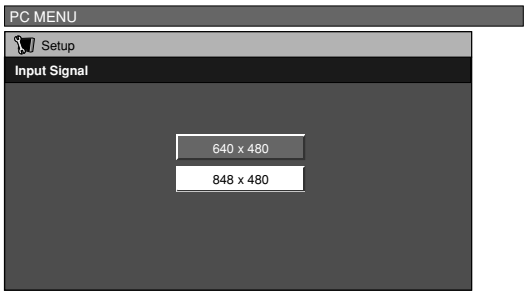
1 Press **MENU** and the PC MENU screen displays.

2 Press ◀/▶ to select “Setup”.
- Setup menu displays.

3 Press ▲/▼ to select “Input Signal” and then press **ENTER**.



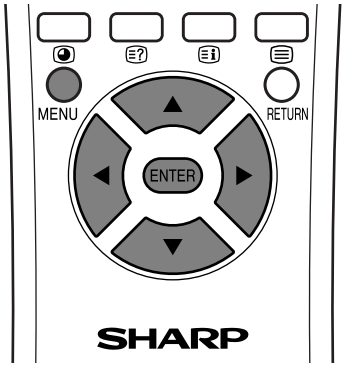
4 Press ▲/▼ to select the desired input signal on the display.



(Example)

Wide screen signalling (WSS) (AV input mode only)

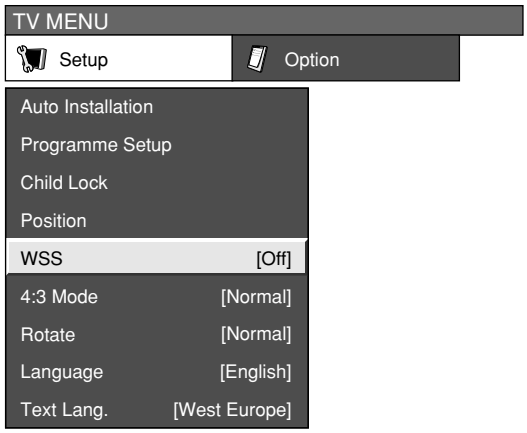
WSS allows a television to switch automatically among the different screen formats.



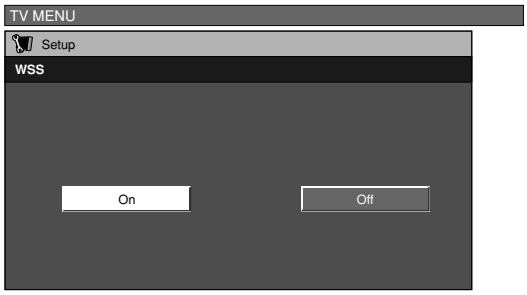
1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Setup”.
- If password is already set, you are asked to enter it. Follow the same steps as explained in “Auto installation”. (See steps 2 and 3 on page 22.)

3 Press ▲/▼ to select “WSS”, and then press **ENTER**.



4 Press ◀/▶ to select “On” or “Off”, and then press **ENTER**.



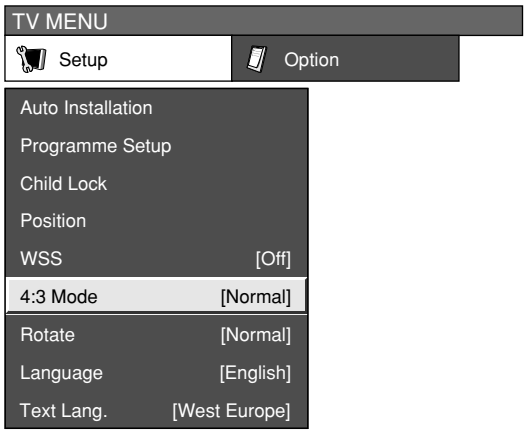
Picture aspect ratio (AV input mode only)

The WSS signal has 4:3 auto-switching that allows you to select between Normal and Panorama.

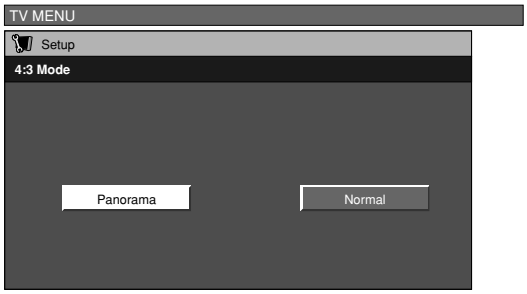
1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Setup”.
- If password is already set, you are asked to enter it. Follow the same steps as explained in “Auto installation”. (See steps 2 and 3 on page 22.)

3 Press ▲/▼ to select “4:3 Mode”, and then press **ENTER**.



4 Press ◀/▶ to select “Normal” or “Panorama”, and then press **ENTER**.



WSS signal 4:3 screen

4:3 mode “Normal”

4:3 mode “Panorama”

Selected item	Description
Normal	Normal range keeping 4:3 or 16:9 aspect ratio
Panorama	Wide image without side bars

NOTE

- Try to set WIDE mode if an image does not switch to the correct screen format. When the broadcast signal contains no WSS information, the function will not work even if enabled. See page 53.

Rotate

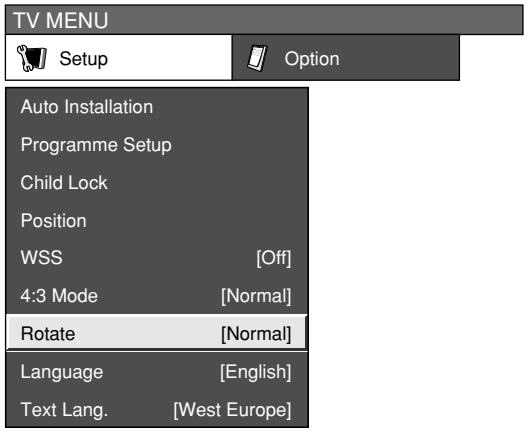
You can set the orientation of the picture.

AV input mode

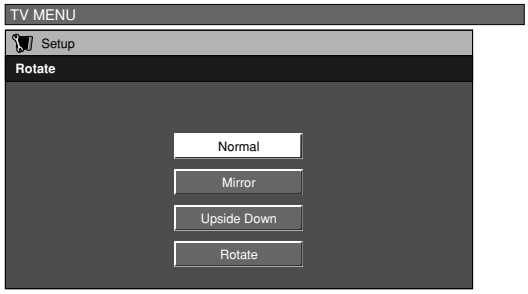
1 Press **MENU** and the TV MENU screen displays.

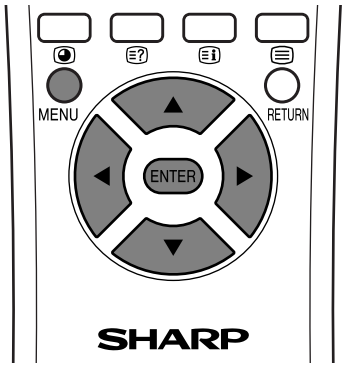
2 Press ◀/▶ to select “Setup”.
- If password is already set, you are asked to enter it. Follow the same steps as explained in “Auto installation”. (See steps 2 and 3 on page 22.)

3 Press ▲/▼ to select “Rotate”, and then press **ENTER**.



4 Press ▲/▼ to select the desired mode, and then press **ENTER**.



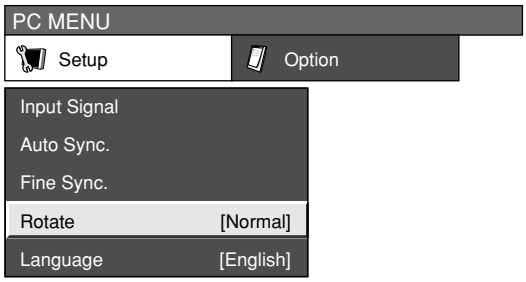


PC input mode

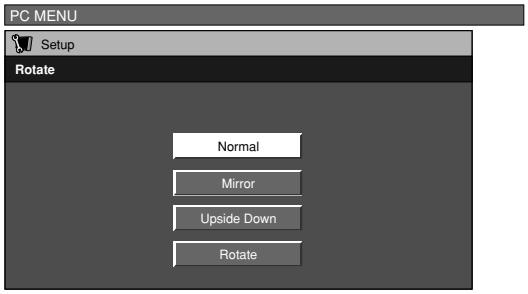
1 Press **MENU** and the PC MENU screen displays.

2 Press ◀/▶ to select “Setup”.
- If password is already set, you are asked to enter it. Follow the same step as explained in “Language setting for on-screen display (PC input mode)”. (See step 2 on page 30.)

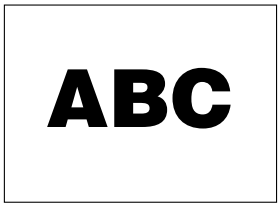
3 Press ▲/▼ to select “Rotate”, and then press **ENTER**.



4 Press ▲/▼ to select the desired mode, and then press **ENTER**.

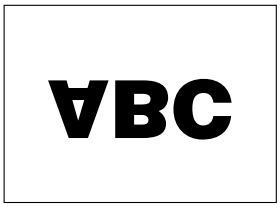


[Normal]: normal image.

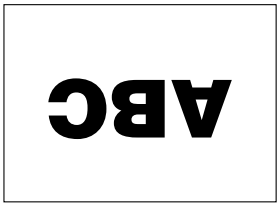


[Mirror]: mirror image.

[Upside Down]: upside down image.



[Rotate]: rotated image.

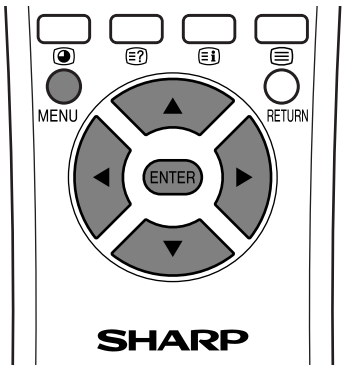


NOTE

- If you choose “Mirror” or “Rotate”, the sound orientation also changes.

Audio out

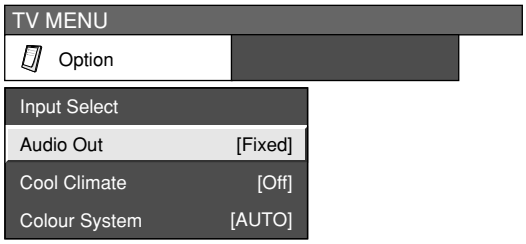
Allows you to select what controls the audio output.



1 Press **MENU** and the TV MENU (PC MENU) screen displays.

2 Press ◀/▶ to select “Option”.
- Option menu displays.

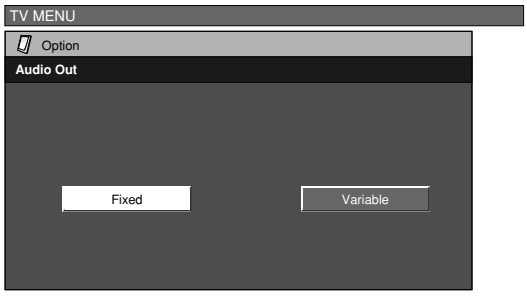
3 Press ▲/▼ to select “Audio Out”, and then press **ENTER**.



(On-screen display for AV input mode.)

(On-screen display for PC input mode.)

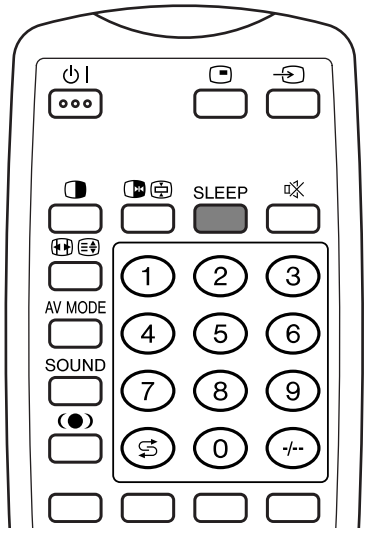
4 Press ◀/▶ to select “Fixed” or “Variable”, and then press **ENTER**.



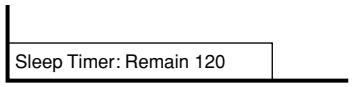
Selected item	Description
Fixed	• Sound via speakers is adjusted with ◿ −/+ on the remote control unit or the Display. • Sound via the MONITOR OUTPUT terminal is not adjustable and constantly outputs.
Variable	• Sound via the MONITOR OUTPUT terminal is adjusted with ◿ −/+ on the remote control unit or the Display. • Sound via speakers is muted.

Sleep timer

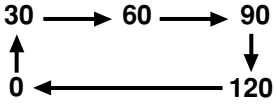
Allows you to set a time when the TV automatically switches to standby.



1 Press **SLEEP**.
- Remaining time displays when sleep timer has been set.



2 Each time you press **SLEEP**, the remaining time switches as shown below.
- When the time has been set, countdown automatically starts.
- Five minutes before the preset of time expires, the remaining time displays each minute.

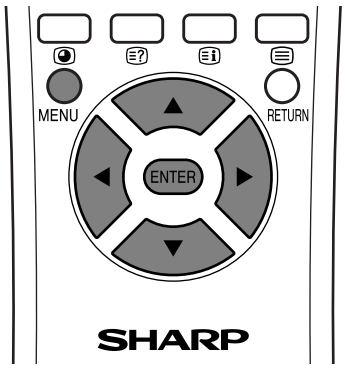


(minutes)

NOTE
- Select “0” by pressing **SLEEP** to cancel the sleep timer.

Cool climate

Improves LCD response when viewing fast-moving images. The effect is greater at low room temperatures (at or below 15˚C/59˚F).

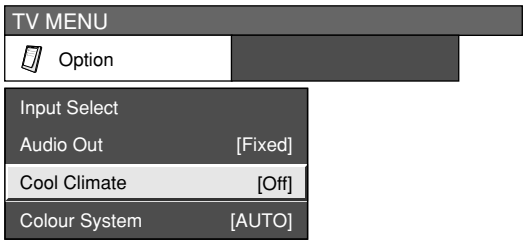


AV input mode

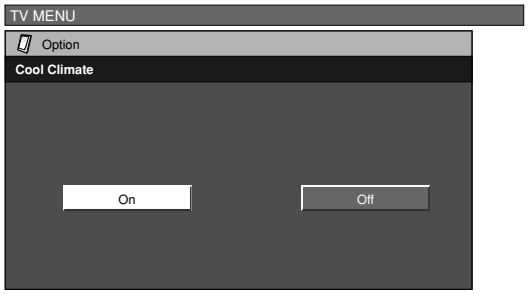
1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Option”.
- Option menu displays.

3 Press ▲/▼ to select “Cool Climate”, and then press **ENTER**.



4 Press ◀/▶ to select “On”, and then press **ENTER**.



NOTE
- Cool climate may cause image noise. If this occurs turn the function “Off”.
- Cool Climate can be set differently for AV input mode and PC input mode.

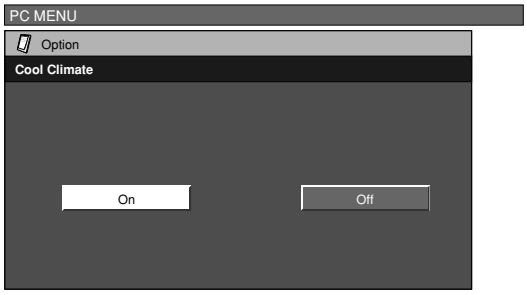
PC input mode

1 Press **MENU** and the PC MENU screen displays.

2 Press ◀/▶ to select “Option”.
- Option menu displays.

3 Press ▲/▼ to select “Cool Climate”, and then press **ENTER**.

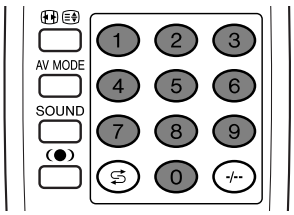
4 Press ◀/▶ to select “On”, and then press **ENTER**.

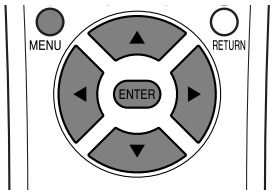


NOTE
- Cool climate may cause image noise. If this occurs turn the function “Off”.
- Cool Climate can be set differently for AV input mode and PC input mode.

Password setting for child lock (TV mode only)

Allows you to use a password to protect certain settings from being accidentally changed.



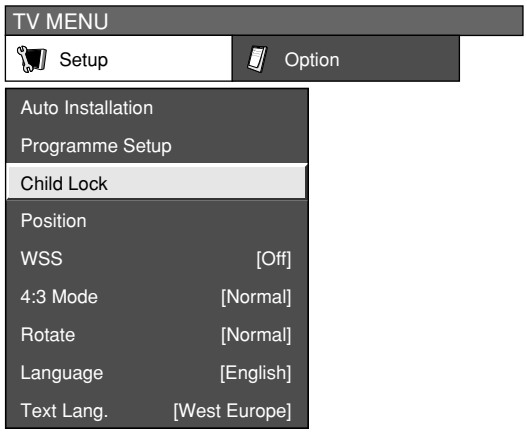


Setting a password

1 Press **MENU** and the TV MENU screen displays.

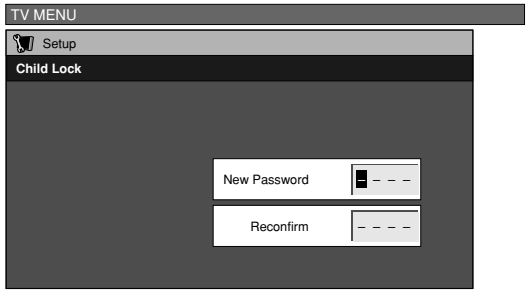
2 Press ◀/▶ to select “Setup”.
- Setup menu displays.

3 Press ▲/▼ to select “Child Lock”, and then press **ENTER**.



4 Press ▲/▼ to select “Password”, and then press **ENTER**.

5 Enter the 4-digit number as a password using **0** – **9**.



6 Enter the same 4-digit number as in step 5 to confirm.
- “The new password is registered.” displays.

NOTE

- To view a locked channel (Lock setting in Programme Setup “Manual” is set to “On”), you must enter a password. (See page 28.) When you select a locked channel, a password prompt message pops up. Press **ENTER** to display the password input window.

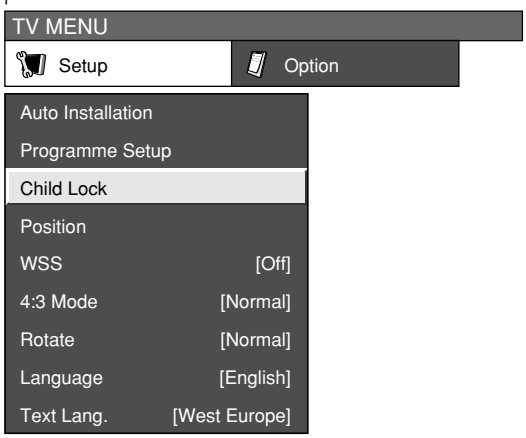
Clearing the password

Allows you to clear your password.

1 Press **MENU** and the TV MENU screen displays.

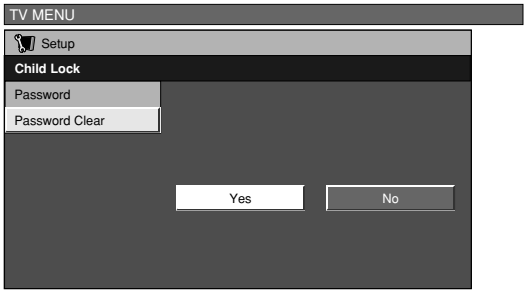
2 Press ◀/▶ to select “Setup”.
- You are asked to enter the password. Follow the same steps as explained in “Auto installation” (See steps 2 and 3 on page 22.)

3 Press ▲/▼ to select “Child Lock”, and then press **ENTER**.



4 Press ▲/▼ to select “Password Clear”, and then press **ENTER**.

5 Press ◀/▶ to select “Yes”, and then press **ENTER**.
- Your password is cleared.



NOTE

- **As a precautionary measure, make a note of your password and keep it in a familiar place. If you lose or forget your password, initialise the System to return all settings except for the TV channel settings to factory preset values. (See page 73.)**

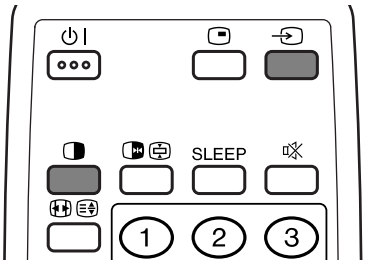
Useful features

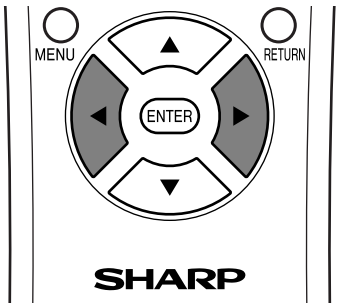
Dual screen functions

Allows you to display two pictures on the screen at one time.

Dual screen

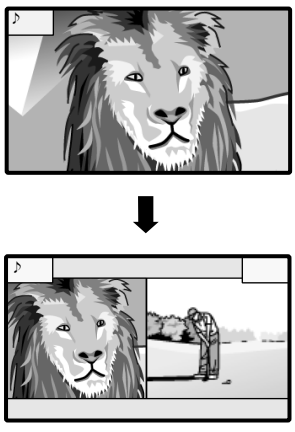
You can display two same-sized pictures except when inputting from a PC INPUT terminal.





1 Press ◑.

- Dual screen displays and a selected input source image displays.



2 Press ◀/▶ to set either screen to be active.

- "♪" displays on the active screen, which has sound output.

3 Press ⏎ to select another input source on the active screen.

- A selected image displays.

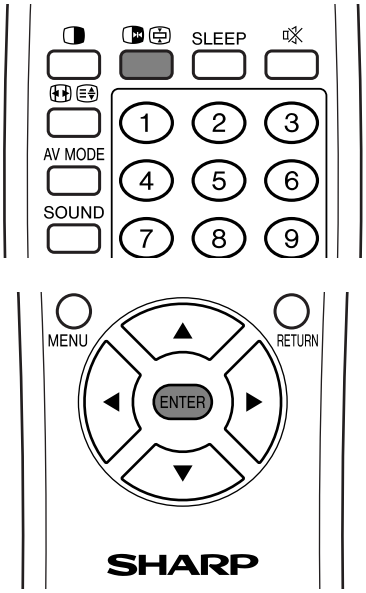
4 Press ◑ to exit dual screen.

NOTE

- This function does not work under the following input conditions:
  ①PC INPUT mode,
  ②Two pictures from the same source (e.g. INPUT 1 and INPUT 1),
  ③Two pictures with different vertical frequency (e.g. PAL and PAL-60).
- When this function is not available, "No dual screen display available." will display.

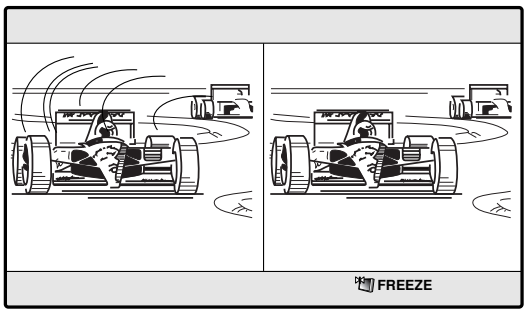
Picture and still image

You can display two same-sized pictures – one moving and one still – when inputting from an AV source.



1 Press .

- A moving image displays on the left screen and a still image displays on the right screen. The still image is one frame captured from a moving image at the moment you press .



2 Update the still image by pressing **ENTER**.

- Each time you press **ENTER**, the image on the right screen updates.

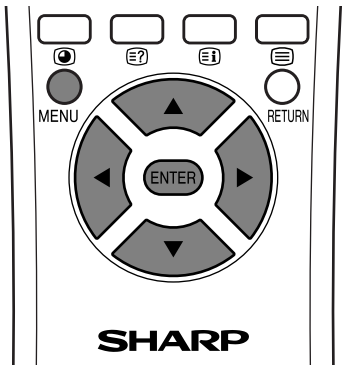
3 Press to exit still image.

NOTE

- This function does not work in PC input mode.
- When this function is not available, “No still image display available.” will display.
- The still image automatically goes out after 30 minutes.

Teletext language setting

If Teletext information does not display correctly, perform the setting procedure below.
Select from among 4 kinds of language tables: West Europe, East Europe, Greek/Turkish, Cyrillic.
Each table is compatible with the Teletext languages listed below.



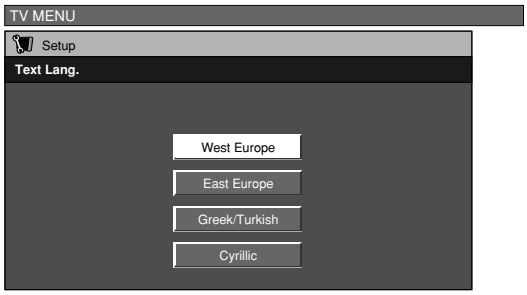
1 Press **MENU** and the TV MENU screen displays.

2 Press ◀/▶ to select “Setup”.

- If password is already set, you are asked to enter it. Follow the same steps as explained in “Auto installation”. (See steps 2 and 3 on page 22.)

3 Press ▲/▼ to select “Text Lang.”, and then press **ENTER**.

4 Press ▲/▼ to select the receivable teletext broadcasting language in your country.



- West Europe - English, French, Scandinavian, Czech, German, Spanish, Italian
- East Europe - Polish, French, Scandinavian, Czech, German, Slovenian/Croatian, Italian, Rumanian
- Greek/Turkish - English, French, Scandinavian, Turkish, German, Spanish, Italian, Greek
- Cyrillic - English, Russian, Estonian, Czech, German, Spanish, Ukrainian, Lettish

NOTE

- Teletext can display only when it is sent by a network. Not used to convert between languages.

Teletext function

What is Teletext?

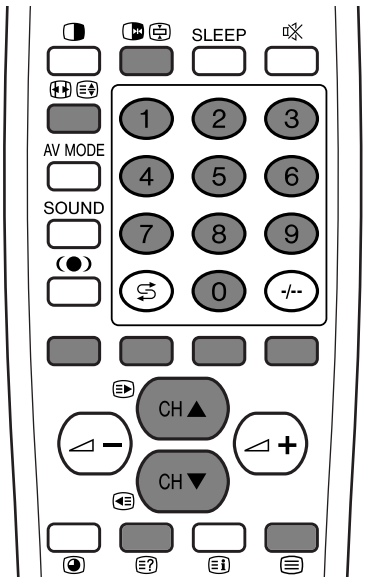
Teletext broadcasts pages of information and entertainment to specially equipped television sets. Your System receives Teletext signals broadcast by a TV network, and decodes them into graphical format for viewing. News, weather and sports information, stock exchange prices and programme previews are among the many services available.

NOTE

- Teletext is broadcast in Europe and Asia, excluding regions that use Arabic characters.

Teletext mode

Teletext is turned on/off with ☰ on the remote control unit. You can operate your System in Teletext mode directly by inputting commands with the remote control unit.



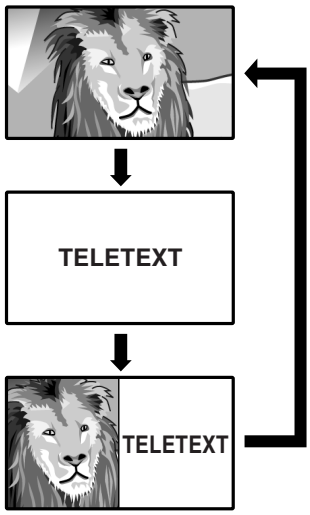
Turning on and off Teletext

1 Select a TV channel or external input source providing the Teletext programme.

2 Press ☰ to display the Teletext.

3 Press ☰ again to display the Teletext on the right screen and normal image on the left screen.

- Each time you press ☰, the screen switches as shown upper right.
- If you select a programme with no Teletext signal, “No Teletext available.” displays.
- The same message displays during dual screen or other modes if no Teletext signal is available.

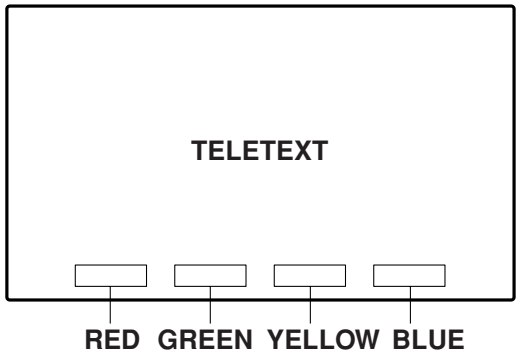


When viewing the Teletext information

- Press **CH▲** (▶) to increase the page number.
- Press **CH▼** (◀) to decrease the page number.

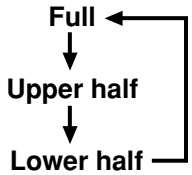
Button functions

Colour (RED/GREEN/YELLOW/BLUE):
You can select a group or block of pages displayed in the coloured brackets at the bottom of the screen by pressing the corresponding **Colour (RED/GREEN/YELLOW/BLUE)** on the remote control unit.



0 – 9:
Directly select any page from 100 to 899 by using **0 – 9**.

:
Each time you press , the TELETEXT image switches as shown below.



:
To reveal hidden information such as an answer to a quiz, press .

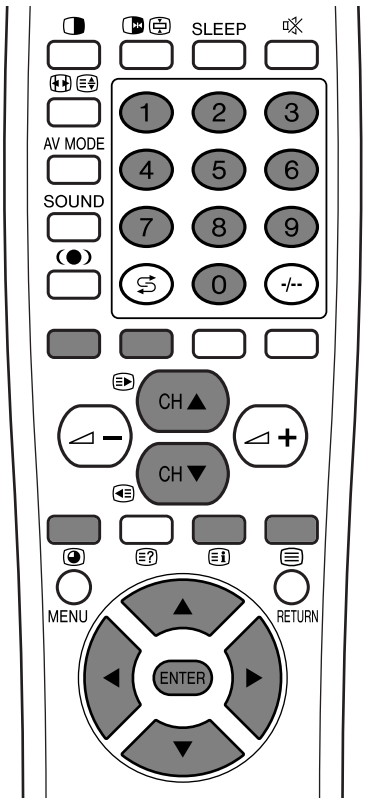
- Press again to hide the information.

:
To stop updating Teletext pages automatically, press .

- Press again to release the hold mode.

Displaying Subpages

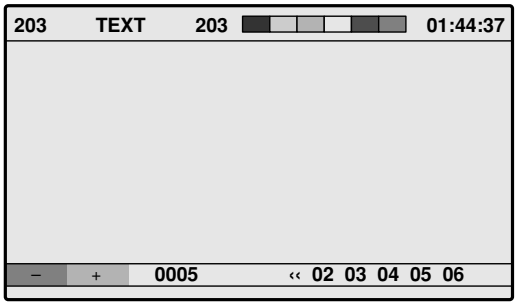
You can display several subpages as they are transmitted.



1 Press (TEXT) to display Teletext.

2 Press (SUBPAGE) to display the subpage as shown below.

Subpage screen



3 Select the desired subpage by using ◀/▶/**RED**/**GREEN**.

- **0** – **9** directly selects the desired subpage.

4 Press (SUBPAGE) to exit the subpage screen.

- If you press (PAGE▶)/(PAGE◀) (**CH▲**/**CH▼**), the present page will change to the next/previous page and simultaneously exit the subpage screen.

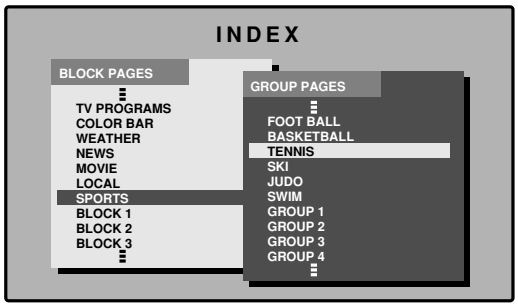
Displaying TOP Overview

When receiving TOP Teletext, you can read a TOP text overview.

1 Press (TEXT) to display Teletext.

2 Press (INDEX) to display the TOP Overview as shown below.

TOP Overview screen



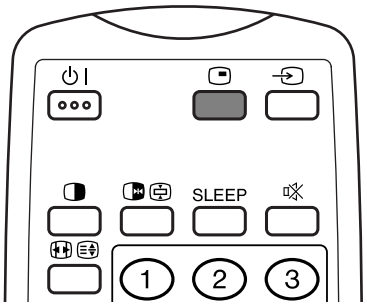
3 Select the desired block or group by using ▲/▼/◀/▶.

4 Press **ENTER** to display the selected block or group pages.

5 Press (INDEX) to exit the TOP Overview screen.

Time display

You can display the time information included in the Teletext. Follow the steps below to display the time.



1 Select a TV channel providing Teletext information.
(The time information is automatically captured.)

NOTE

- The time is not captured when a selected channel has no Teletext information.

2 Press ⊡. The channel display will appear on the Display.

3 Press ⊡ again within the three-second interval the channel display is on the screen. Time information will display on the lower left of the screen for about three seconds.

4 Even when you change the TV channel, you can display the time information with steps 2 – 3 above.

NOTE

- The time display cannot be stored once the power is turned off. When you turn on the power, perform steps 1 – 4 again.

Appendix

Troubleshooting

Problem	Possible Solution
• No power.	• Make sure the Display and the AVC System are connected correctly. (See page 8.) • Check if you pressed ⏻	on the remote control unit. (See page 16.) If the indicator on the Display lights up red, press ⏻	(STANDBY/ON) button. • Is the AC cord disconnected? (See page 15.) • Has the main power been turned on? (See page 16.)
• Unit cannot be operated.	• External influences such as lightning, static electricity, etc., may cause improper operation. In this case, operate the unit after first turning the power of the Display and the AVC System, or unplugging the AC cord and re-plugging it in after 1 or 2 minutes.
• Remote control unit does not operate.	• Are batteries inserted with polarity (+, −) aligned? (See page 11.) • Are batteries worn out? (Replace with new batteries.) • Are you using it under strong or fluorescent lighting? • Is a fluorescent light illuminated to remote control sensor?
• Picture is cut off.	• Is the image position correct? (See pages 48 and 49.) • Are screen mode adjustments such as picture size made correctly? (See pages 53 to 56.)
• Strange colour, light colour, or dark, or colour misalignment.	• Adjust the picture tone. (See pages 31 to 35 and 59.) • Is the room too bright? The picture may look dark in a room that is too bright. • Check the colour system setting. (See pages 27 and 52.) • Check the input signal setting. (See page 51.)
• Power is suddenly turned off.	• The unit's internal temperature has increased. Remove any objects blocking vent or clean. • Check the power control setting. (See pages 37 to 39.) • Check the sleep timer setting. (See page 58.)
• No picture.	• Is connection to other components correct? (See pages 40 to 45.) • Is correct input signal source selected after connection? (See page 51.) • Is the correct input selected? (See page 51.) • Is a non-compatible signal being input? (See page 67.) • Is picture adjustment correct? (See pages 31 to 35.)
• No sound.	• Is the volume too low? (See page 18.) • Is "Variable" selected in "Audio Out"? (See page 58.) • Is correct speaker output ("External" or "Detachable") selected in "Speaker"? (See page 47.) • During Auto search, the sound system should automatically be detected. However, auto-detect may not find some signals, in which case choose Manual. (See page 27.)
• Picture is not clear. • No sound. (Even though the System is receiving bilingual and stereo signals, there is no sound and the mode menu does not display.)	• The Auto search (or Auto Installation) automatically searches for compatible sound systems, but may not detect them depending on electric field conditions. In that case, adjust to optimum sound system position by following directions on page 27.

Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the LCD panel to malfunction.
  Storage temperature: –20°C to +60°C (–4°F to +140°F).

PC compatibility chart

Resolution	Frequency	Remarks
640×400	85 Hz	
720×400	70 Hz	
	85 Hz	
640×480	60 Hz	
	65 Hz	Macintosh 13″ (67 Hz)
	72 Hz	
	75 Hz	
	85 Hz	
800×600	56 Hz	
	60 Hz	
	72 Hz	
	75 Hz	
	85 Hz	
832×624	74.5 Hz	Macintosh 16″
1024×768	60 Hz	
	70 Hz	
	75 Hz	Macintosh 19″
	85 Hz	
1280×768	60 Hz	
1280×1024	60 Hz	

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DDC is a registered trademark of Video Electronics Standards Association.
Power Management is a registered trademark of Sun Microsystems, Inc.
VGA and XGA are registered trademarks of International Business Machines Co., Inc.

RS-232C port specifications

PC Control of the System

- When a program is set, the display can be controlled from the PC using the RS-232C terminal. The input signal (PC/AV) can be selected, the volume can be adjusted and various other adjustments and settings can be made, enabling automatic programmed playing.

- Attach an RS-232C cable cross-type (commercially available) to the supplied Din/D-Sub RS-232C for the connections.

NOTE

- This operation system should be used by a person who is accustomed to using PCs.

Communication conditions

Set the RS-232C communications settings on the PC to match the display's communications conditions. The display's communications settings are as follows:

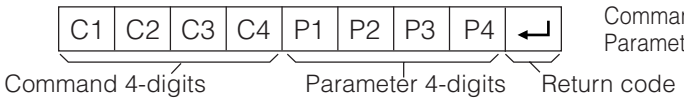
Baud rate:	9,600 bps
Data length:	8 bits
Parity bit:	None
Stop bit:	1 bit
Flow control:	None

Communication procedure

Send the control commands from the PC via the RS-232C connector.
The Display operates according to the received command and sends a response message to the PC.
Do not send multiple commands at the same time. Wait until the PC receives the OK response before sending the next command.

Command format

Eight ASCII codes + CR



Command 4-digits: Command. The text of four characters.
Parameter 4-digits: Parameter 0 – 9, x, blank, ?

Parameter

Input the parameter values, aligning left, and fill with blank(s) for the remainder. (Be sure that four values are input for the parameter.)
When the input parameter is not within an adjustable range, “ERR” returns. (Refer to “Response code format”.)
No problem to input any numerical value for “x” on the table.

0			
0	0	0	9
–	3	0	
1	0	0	
0	0	5	5

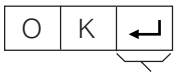
When “?” is input for some commands, the present setting value responds.

?			
?	?	?	?

Appendix

Response code format

Normal response



Problem response (communication error or incorrect command)

Commands

CONTROL ITEM	COMMAND				PARAMETER				CONTROL CONTENTS
POWER SETTING	P	O	W	R	0	_	_	_	POWER OFF (STANDBY)
INPUT SELECTION A	I	T	G	D	x				INPUT SWITCHING (TOGGLE)
	I	T	V	D	0	_	_	_	TV (CHANNEL FIXED)
	I	T	V	D	*	*	_	_	TV (CHANNEL SELECTION) (1 – 99)
	I	A	V	D	*	_	_	_	INPUT1 – 4 (1 – 4)
	I	P	C	D	x				PC
INPUT SELECTION B	I	N	P	1	0	_	_	_	INPUT1 (AUTO)
	I	N	P	1	1	_	_	_	INPUT1 (COMPONENT)
	I	N	P	1	2	_	_	_	INPUT1 (S-VIDEO)
	I	N	P	1	3	_	_	_	INPUT1 (VIDEO)
	I	N	P	2	0	_	_	_	INPUT2 (AUTO)
	I	N	P	2	1	_	_	_	INPUT2 (S-VIDEO)
	I	N	P	2	2	_	_	_	INPUT2 (VIDEO)
	I	N	P	3	0	_	_	_	INPUT3 (AUTO)
	I	N	P	3	1	_	_	_	INPUT3 (COMPONENT)
	I	N	P	3	2	_	_	_	INPUT3 (S-VIDEO)
	I	N	P	3	3	_	_	_	INPUT3 (VIDEO)
	I	N	P	4	0	_	_	_	INPUT4 (AUTO)
	I	N	P	4	1	_	_	_	INPUT4 (S-VIDEO)
	I	N	P	4	2	_	_	_	INPUT4 (VIDEO)
AV MODE SELECTION	A	V	M	D	0	_	_		TOGGLE
	A	V	M	D	1	_	_	_	STANDARD
	A	V	M	D	2	_	_	_	DYNAMIC
	A	V	M	D	3	_	_	_	MOVIE
	A	V	M	D	4	_	_	_	GAME
	A	V	M	D	5	_	_	_	USER
VOLUME	V	O	L	M	*	*	_	_	VOLUME (0 – 60)
POSITION	H	P	O	S	*	*	*	_	H-POSITION (AV) (–10 – +10)
	H	P	O	S	*	*	*	_	H-POSITION (PC) (–90 – +90)
	V	P	O	S	*	*	*	_	V-POSITION (AV) (–30 – +30)
	V	P	O	S	*	*	*	_	V-POSITION (PC) (–60 – +60)
	C	L	C	K	*	*	*	_	CLOCK (–90 – +90)
	P	H	S	E	*	*	*	_	PHASE (–20 – +20)

CONTROL ITEM	COMMAND				PARAMETER				CONTROL CONTENTS
WIDE MODE	W	I	D	E	0	_	_	_	TOGGLE
	W	I	D	E	1	_	_	_	NORMAL
	W	I	D	E	2	_	_	_	FULL 14:9
	W	I	D	E	3	_	_	_	ZOOM 14:9
	W	I	D	E	4	_	_	_	PANORAMA
	W	I	D	E	5	_	_	_	FULL
	W	I	D	E	6	_	_	_	CINEMA 16:9
	W	I	D	E	7	_	_	_	CINEMA 14:9
	W	I	D	E	8	_	_	_	NORMAL
	W	I	D	E	9	_	_	_	FULL
	W	I	D	E	1	0	_	_	DOT BY DOT
	W	I	D	E	1	1	_	_	CINEMA
SRS	S	R	S	S	0	_	_	_	TOGGLE
	S	R	S	S	1	_	_	_	OFF
	S	R	S	S	2	_	_	_	SRS
	S	R	S	S	3	_	_	_	FOCUS
	S	R	S	S	4	_	_	_	SRS + FOCUS
DUAL SCREEN	T	W	I	N	0	_	_	_	DUAL SCREEN OFF
	T	W	I	N	1	_	_	_	DUAL SCREEN ON
CHANNEL	D	C	C	H	*	*	_	_	DIRECT CHANNEL (1 – 99)
	C	H	U	P	x				CHANNEL UP
	C	H	D	W	x				CHANNEL DOWN
TEXT	T	E	X	T	0	_	_	_	TEXT OFF
	T	E	X	T	1	_	_	_	TEXT ON (TOGGLE)
	D	C	P	G	*	*	*	_	DIRECT PAGE JUMP (100 – 899)

NOTE

- If an underbar (_) appears in the parameter column, enter a space.
- If an asterisk (*) appears, enter a value in the range indicated in brackets under CONTROL CONTENTS.

Specifications

Item				37″ LCD COLOUR TV, Model:LC-37HV4M
LCD panel				37″ Advanced Super View & BLACK TFT LCD
Number of dots				3,147,264 dots (1366 × 768 × 3 dots)
Video Colour System				PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60
TV Function	TV-standard (CCIR)			PAL: B/G, D/K, I SECAM: B/G, D/K NTSC: M
	Receiving Channel	VHF/UHF		44.25-863.25 MHz
		CATV		Hyper-band, S1–S41ch
	TV-Tuning System			Auto Preset 99 ch, Auto Label, Auto Sort
	STEREO/BILINGUAL			NICAM/IGR
Brightness				430 cd/m^2
Backlight				60,000 hours (at Manual 0 position)
Viewing angles				H : 170° V : 170°
Audio amplifier				10W × 2
Speakers				Ø 8 cm 2pcs
Terminals	AVC System	Rear	INPUT 1	AV in, S-VIDEO in, COMPONENT VIDEO in
			INPUT 2	AV in, S-VIDEO in
			INPUT 3	AV in, S-VIDEO in, COMPONENT VIDEO in
			ANTENNA	75 Ω Din Type
			MONITOR OUTPUT	Audio (Variable, Fixed), S-VIDEO out, VIDEO out
			DC OUTPUT	DC 6.5V 7W MAX
		Front	INPUT 4	S-VIDEO, AV in
			PC INPUT	15 Pin mini D-Sub, Audio in (Ø 3.5mm jack)
			Headphones	Ø 3.5mm jack
OSD language				English/Chinese/Arabic
Power Requirement				AC 110–240 V, 50/60 Hz
Power Consumption	AVC System			31 W (0.8W Standby)
	Display			132 W (0.8W Standby)
Weight	AVC System			5.4 kg (w/o stand), 5.5 kg (with stand)
	Display			16.5 kg (Display only), 19.9 kg (with Display and speakers), 24.0 kg (with Display, speakers and stand)
Accessories				Operation manual, Remote control unit (×1), System cable (×1), AC cord (×2), LR6 (“AA” size) Alkaline battery (×2), Stand unit (×1), Speaker (L×1, R×1), Speaker screw (×4), Cable clamp (Large ×1, Small ×2), Stand stability unit (×1), Antenna cable (×1)

- As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Optional accessories

The listed optional accessories are available for the LCD colour TV. Please purchase them at your nearest shop.

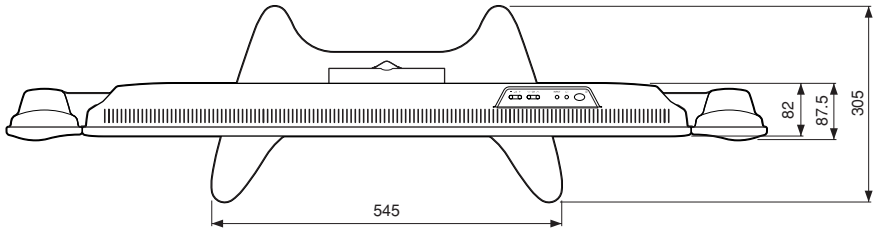
- Additional optional accessories may be available in near future. When purchasing, please read the newest catalogue for compatibility and check the availability.

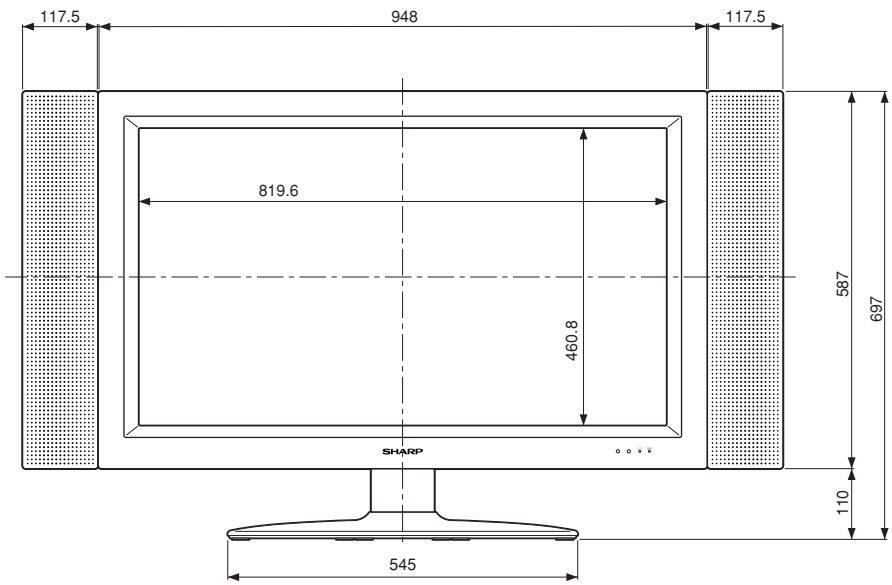
No.	Part name	Part number
1	Wall mount bracket	AN-37AG1
2	System cable (7 meters)	AN-07SC1

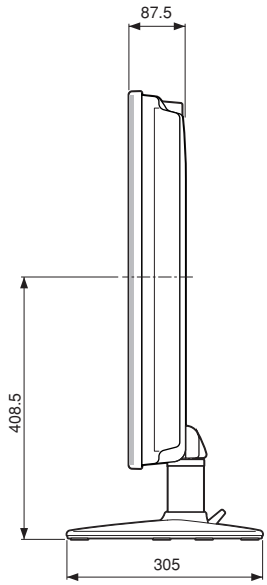
Dimensional drawings

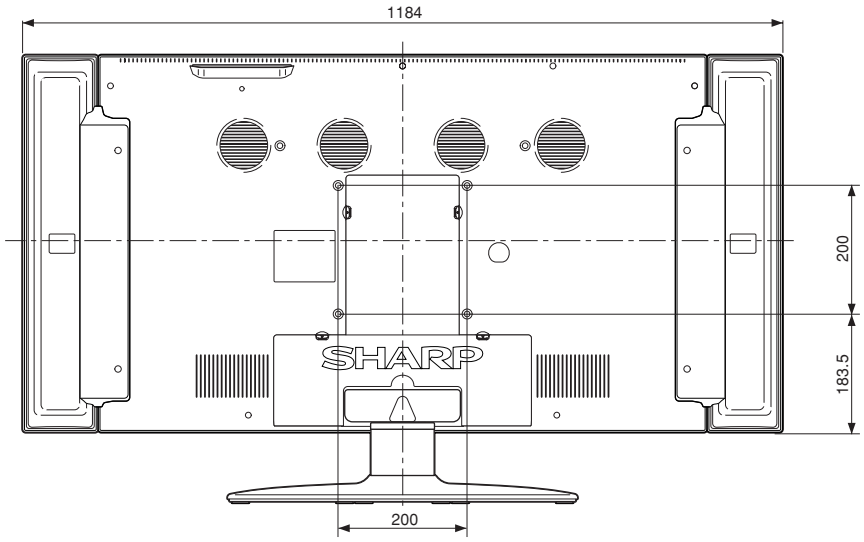
Display

Unit: mm





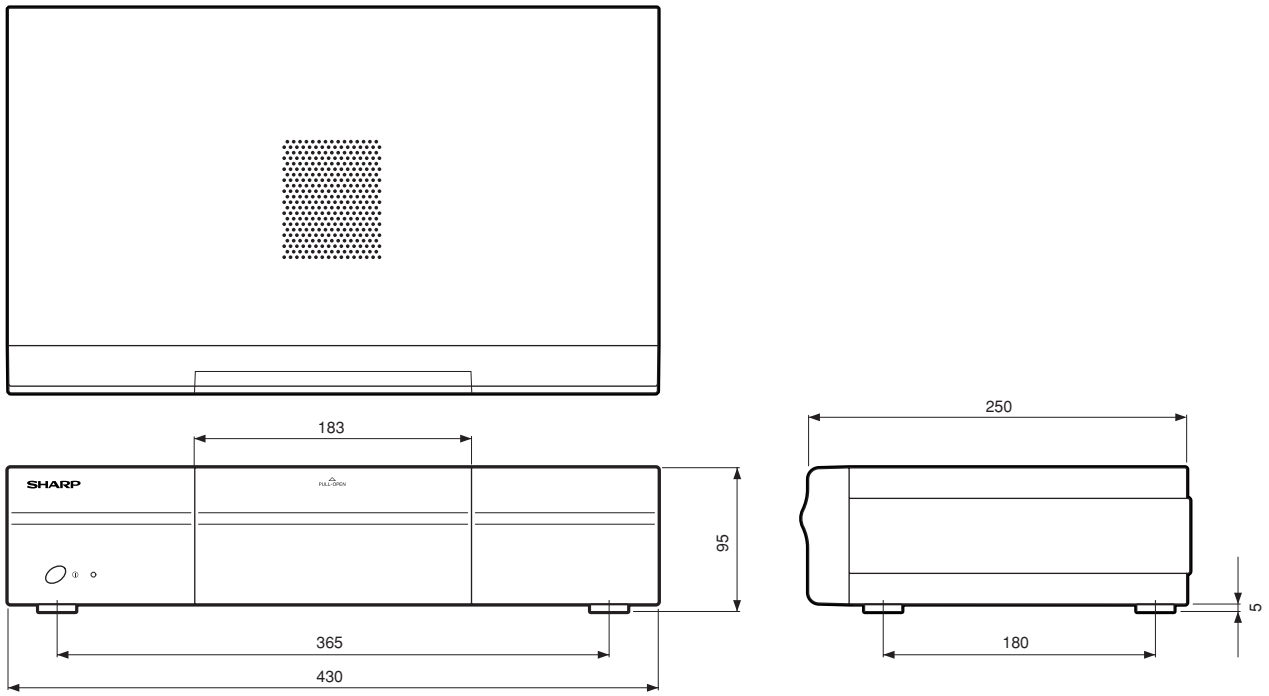




Dimensional drawings

AVC System

Unit: mm



HOW TO SET THE FACTORY PRESETS

Press and hold down **CLEAR** on the AVC System while it is in standby mode. Then press ⏻ | (STANDBY/ON) button on the Display or ⏻ | on the remote control unit to turn the System on.
All setting items (except TV channel) return to the factory presetting.

NOTE

- Running the factory presetting operation also clears the password.

You can run the Auto Installation again by using the following steps.

1 Turn on the power of the Display and the AVC System.
2 Press **MENU**. (Make sure the menu screen displays.)
3 Press ◀/▶ to select “Setup”.
4 Press **ENTER**.

NOTE

- If the password setting screen displays, you need to enter your password.
- If you forget your password, refer to HOW TO SET THE FACTORY PRESETS above.

5 Press ▲/▼ to select “Auto Installation”.
6 Press **ENTER**.

The password is | | | | | .

NOTE

- As a precautionary measure, make a note of your password above, scissor it from this manual, and keep it in a familiar place.

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